Fiscal Year 2014

Civil Works
Budget Details for the
U.S. Army Corps of Engineers

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of the Army
Office, Assistant Secretary
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FY 2014 Budget Justification Information

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JUSTIFICATION OF ESTIMATE

INVESTIGATIONS

ALASKA

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
Alaska Regional Ports, AK Tier 1, Alaska Deep Draft Arctic Ports Alaska District	3,161,000	1,411,000	250,000	0	300,000 2/	500,000 1/	700,000
Alaska Regional Ports, AK Tier 2, Point Mackenzie Shoal Alaska District (completion)	1,000,000	0	0	750,000	0 2/3/	250,000 1/	0

The Alaska Regional Ports study focuses on evaluating the problems, opportunities, and needs for regional ports throughout the State of Alaska. Navigation access to local ports is critical to all the 200 plus coastal communities in Alaska, which are primarily served by a regional port system where small barges transship cargo from ocean going barges and small freighters. Since there are few connecting roads and the economy is primarily based on commercial fishing and natural resources development, consideration of regional ports is needed due to the economic, social and cultural dependence these communities have on marine resources and waterborne transportation. The Alaska Department of Transportation and Public Facilities (ADOT&PF) requested the study for harbor improvements in Alaska that focuses on developing a regional ports system that would serve as an integrated intermodal system of importance to the state, the nation, and global markets.

The reconnaissance study was completed in May 2008 and determined that additional systems-based feasibility studies appear to be in the Federal interest and to warrant investigation of regional navigation improvements. The Feasibility Cost Sharing Agreement was signed on 21 September 2009 with the Alaska Department of Transportation and Public Facilities (ADOT&PF). Phase I of the Feasibility Study culminated with the November 18, 2010 Alaska Regional Ports Conference that was attended by harbor users, local, state, and Federal government agencies.

As resource extraction demands increase for the Arctic and the sea ice continues to melt, deep draft commercial vessels usage of the Northern Sea Route for passage between Pacific and Atlantic ports has been increasing exponentially. A planning charette was held in May 2011 that focused attention on the need for deep-draft port capability in the Arctic. As natural resource extraction becomes more economically feasible, harbors of refuge would be needed to provide safe moorage and tug assistance to vessels in distress. Regional ports would provide a comprehensive harbor network for national defense support and safe moorage for the fishing fleet and small commercial ships. The Alaska Regional Ports Study is being conducted on a tiered approach.

Tier 1 Agreement, Alaska Deep-Draft Arctic Ports, Alaska. As an Arctic Nation, the Alaska Department of Transportation and Public Facilities (ADOT&PF) requested a Tier 1 Agreement to study the problems, opportunities, and need to develop a deep-draft port system in the Arctic. Vessel traffic in the Arctic is on the rise; oil and gas industry activities on the Outer Continental Shelf began in the summer 2012; cruise liners, military craft, tugs and barges, and fishing vessels are all present and active in the Arctic. There are significant safety concerns as well as implications related to the Nation’s economy, environment, and national security. The study is primarily focusing on transportation/extraction of resources and minerals, with particular interest in involving a Public-Private Partnership with industry and the state. The Feasibility Cost Sharing Agreement was executed in December 2011.

Tier 2 Agreement, Point MacKenzie Shoal, Alaska. Based on concerns expressed by the shipping industry, the ADOT&PF requested a Tier 2 Agreement to study the Point MacKenzie Shoal which is encroaching on the navigation channel serving both the Port of Anchorage and Port Mackenzie. The scope of the investigation is to determine the composition and consistency of the Point MacKenzie Shoal and to provide a long-term solution to the problems posed by the growth of the shoal. The Feasibility Cost Sharing Agreement for Tier 2 was executed on 14 June 2012. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$7,434,000
Reconnaissance Phase (Federal)	888,000
Feasibility Phase (Federal)	3,273,000
Feasibility Phase (Non-Federal)	3,273,000

Tier 1 (Alaska Deep Draft Arctic Ports)

Total Estimated Study Cost	$5,434,000
Reconnaissance Phase (Federal)	888,000
Feasibility Phase (Federal)	2,273,000
Feasibility Phase (Non-Federal)	2,273,000

Tier 2 (Point Mackenzie Shoal)

Total Estimated Study Cost	$2,000,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

Fiscal Year (FY) 2013 funds will be used to complete the Tier 1 (Alaska Deep-Draft Arctic Ports) potential Arctic port site assessment and continue site specific Arctic port investigations. FY 2014 funds would be used to continue the Tier 1 (Alaska Deep Draft Ports) site specific Arctic port investigations and complete the Tier 2 (Point MacKenzie Shoal) shoal investigations.

The study is being conducted under the Study Resolution on Rivers and Harbors in Alaska adopted on 2 December 1970 by the Committee on Public Works of the U.S. House of Representatives.

The Tier 1 (Alaska Deep Draft Arctic Ports) feasibility completion is TBD. The Tier 2 (Point MacKenzie Shoal) study is scheduled for completion in FY 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ $667,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. This amount will be used to continue investigations of the Point MacKenzie Shoal.

$0 rescinded from the project.

$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Little Diomede SBH, AK Alaska District (completion)	1,893,000	1,543,000	200,000	50,000	0 2/3/	100,000 1/	0

The City of Diomede lies on the west coast of Little Diomede Island, Alaska, 2.5 miles from Big Diomede Island, Russia. The two Diomede islands lie in the center of the Bering Straits, 135 miles northwest of Nome (the nearest harbor). Access to Diomede is limited to weekly helicopter service during the summer open water periods and intermittent fixed wing aircraft during the winter, which is dependent upon construction of an ice runway. Both types of service are very weather dependent. Service is also very limited in the size and type of goods that can be shipped. Diomede has no protected harbor, and regular freight barges have ceased delivering cargo because of the high risk of barge damage and weather delays. Some independent barge operators will go to Diomede for premium fees. New construction, equipment, major repairs to infrastructure, and even replacement of household appliances are impacted and delayed because of increased transportation costs. During some winters, an ice runway can be built on the sea ice for fixed wing aircraft, which can deliver some larger items, but at exorbitant costs. A harbor would greatly reduce the cost of goods and increase access to the village. In addition, coastal storms damage the infrastructure, and there are no alternatives for relocating the infrastructure. A cost-sharing agreement for the feasibility study was signed on November 6, 2006 with Kawerak, Inc. (regional non-profit tribal corporation) as agents for the Native Village of Diomede, and the study is ongoing. The community of Diomede is almost 94% Alaska Native. Most residents rely on subsistence for survival, most of which comes from the sea, and over 35% of the residents are defined as being in poverty.

The estimated cost of the feasibility phase is $3,168,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Fiscal Year (FY) 2012 funds were used to perform Phase 2 of the feasibility study. No funds were received in FY 2013, unobligated funds carried in from FY 2012 are being used to continue feasibility study activities. FY 2014 funds will be used to complete the feasibility report.

Total Estimated Study Cost	$3,477,000
Reconnaissance Phase (Federal)	309,000
Feasibility Phase (Federal)	1,584,000
Feasibility Phase (Local)	1,584,000

The study is being conducted under the Study Resolution on Rivers and Harbors in Alaska adopted on 2 December 1979 by the Committee on Public Works of the U.S. House of Representatives.

The feasibility study is scheduled for completion in FY 2014.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ $121,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. This amount will be used to continue feasibility study activities.

$0 rescinded from the project.

$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Matanuska Watershed, AK Alaska District	3,812,000	1,517,000	499,000	296,000	100,000 2/	200,000 1/	1,200,000

The Matanuska-Susitna Watershed is located about 50 miles north of Anchorage, Alaska in the Matanuska-Susitna Borough. The Matanuska-Susitna Borough has experienced increased development in recent years (~4%/year) with resulting concerns about flooding, stream bank erosion, aquatic habitat degradation, and overall health within their watershed. The ongoing collaborative study includes partners such as the Matanuska Watershed Coalition, The Native Village of Chickaloon, and the Mat-Su Salmon Partnership, a pilot project under the National Fish Habitat Initiative. The study is investigating water resource related concerns in the Matanuska and Susitna watershed and develop a comprehensive water resources plan to provide the Borough, Federal and State agencies with a planning tool that would assist in making better decisions related to future development within the watershed. In a collaborative effort with District Regulatory personnel, USEPA, and USFWS, the watershed plan will provide a comprehensive approach to managing wetland impacts and evaluating wetland quality so that appropriate mitigation can be applied on a consistent basis throughout the watershed. A Feasibility Cost Sharing Agreement was executed on 27 September 2007 with Matanuska-Susitna Borough.

Fiscal Year (FY) 2012 were used to continue the feasibility study and gather data needed to evaluate the water resource needs of the watershed. FY 2013 funding are being used to continue wetland mapping and application of functional assessment process. FY 2014 funds will be used to initiate development of the watershed plan requirements.

Total Estimated Study Cost	$7,329,000
Reconnaissance Phase (Federal)	295,000
Feasibility Phase (Federal)	3,517,000
Feasibility Phase (Local)	3,517,000

The study is being conducted under the Rivers and Harbors in Alaska Resolution, 2 December 1970. The feasibility study completion date is TBD.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

$0 rescinded from the project.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

HAWAII

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Ala Wai Canal, Oahu, HI Honolulu District	4,830,000	3,085,000	(1,000)	383,000	400,000 2/	400,000 1/	563,000

The Ala Wai watershed encompasses more than 19 square miles on the island of Oahu. The study area extends from the ridge of the Koolau Mountains to the nearshore waters of Malama Bay and includes Makiki, Manoa and Palolo streams. These streams all drain to the Ala Wai Canal, a two-mile long, man-made waterway constructed during the 1920's to drain extensive coastal wetlands. Due to development and alterations over the years, residents of the Ala Wai watershed are at risk to flood damages and the aquatic ecosystem is significantly degraded.

Approximately 3,000 properties are at risk of damage from a 100-year flood event under existing conditions. In 1965, 1967, and 1992, Waikiki experienced severe flooding. In 2004, Manoa stream overflowed its banks and caused over $80M in damages to property and irreplaceable documents in the University of Hawaii's library. In 2006, the Makiki neighborhood also experienced heavy flooding.

The Ala Wai watershed supports important habitat for marine, estuarine and freshwater ecosystems. Endemic amphidromous species such as native gobies and freshwater shrimp are dependent upon healthy streams, estuaries and marine habitat as they transit through these systems during their life-cycles. Alterations to the stream channel over time have altered stream flow, making the streams impassable for much of the year. Urban uses and activities further exacerbate ecosystem degradation through loading of sediment and pollutants that impair fish habitat and health. As a result, the streams and the Canal are included on the Environmental Protection Agency Section 303(d) List of Impaired Waters.

The project is a cooperative effort with Federal, State and local agencies. The project goal is to improve the overall quality of the Ala Wai watershed. Based on recent flood events and a re-scoping charette held in October 2012, the primary focus has shifted to Flood Risk Management with ecosystem restoration in specific reaches to improve aquatic habitat.

The feasibility cost sharing agreement was executed in April 2001 with the State Department of Land and Natural Resources and subsequently amended in August 2006 and November 2012 for a total study cost of $9,258,000. In October 2012, a re-scoping charette was held to ensure compliance with US Army Corps fo Engineers' Specific, Measurable, Attainable, Risk Informed, Timely planning initiative. The estimated total cost to complete the study is $2,269,000. The Draft Feasibility/Environmental Impact Statement (EIS) is scheduled for Fiscal Year (FY) 2014 with the Chief's Report scheduled for FY 2015 or earlier. FY 2013 funds are being used to receive concurrence on the final array of alternatives and identify the tentatively selected plan. FY 2014 funds will be used to seek concurrence on the tentatively selected plan, publish the Draft Feasibility/EIS Report, conduct concurrent public, policy, technical reviews, including Independent External Peer Review (IEPR).

The total estimated cost of the feasibility phase is shared on a 50-50 percent basis by Federal and non-Federal interests, except for the IEPR which is funded at 100% federal cost and is estimated to cost $152,000. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$9,383,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	4,705,000
Feasibility Phase (Non-Federal)	4,553,000

The study is authorized under Section 209 of the Rivers and Harbors Act of 1962, Harbors and Rivers in Hawaii.

The reconnaissance phase was completed in August 1999. The feasibility phase is scheduled for completion in TBD.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

$1,000 was rescinded from the project in FY 2011

$408,000 was transferred to the Flood Control and Coastal Emergencies (FCCE) in FY 2011

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Hilo Harbor Modifications, Hawaii, HI	1,671,000	96,000	0	351,000	0 2/3/	775,000 1/	449,000
Honolulu District							

Hilo Harbor is located on the northeast coast of the island of Hawaii, the State of Hawaii's southernmost island. The harbor is approximately two miles from the business district of Hilo, the island's city and county seat and is the principal commercial port for the island (the second being Kawaihae Harbor on the west side of the island) and the fourth largest port in the State in terms of total goods shipped. The harbor provides a wide range of maritime facilities and services including the island's only pier large enough to accommodate visiting cruise ships. Among the commodities moving through the harbor are liquid bulk cargo, including all of the island's petroleum products, container cargo, and new vehicles.

Hilo Harbor was constructed by the Corps of Engineers in 1930 and consists of a 10,080-foot long breakwater protecting a 35-foot deep turning basin. Vessel traffic is currently resulting in maximum usage of the existing commercial harbor facilities. The State of Hawaii, Department of Transportation, Harbors Division (DOT-Harbors) recently completed an updated master plan for Hilo Harbor which identified the need for modification or expansion of the existing harbor to accommodate larger vessels with the intent of increasing operating efficiency at the harbor and reducing cargo transportations costs. The master plan recommended enlarging the turning basin to accommodate future construction and/or extension of piers, as well as use of the area by larger ships. The existing harbor is unable to accommodate larger vessels without significant grounding risk. Additionally, adverse surge conditions during winter months often preclude users from safely mooring and operating their vessels. DOT-Harbors is the sponsor for this project. In December 2011, DOT-Harbors provided a letter of intent indicating that they fully understand the feasibility cost-sharing requirements. A final 905(b) was approved in July 2012. A Feasibility Cost Share Agreement (FCSA) is scheduled to be executed in Fiscal Year (FY) 2013. The reconnaissance phase is scheduled for completion in FY 2013.

FY 2013 funds would be used to initiate the feasibility phase upon execution of the FCSA in FY 2013. FY 2014 funds will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests, with the exception of the Independent External Peer Review (IEPR). The estimated cost of the IEPR is $150,000 and will be fully Federal funded. A summary of the study cost sharing follows:

Total Estimated Study Cost	$3,096,000
Reconnaissance Phase (Federal)	96,000
Feasibility Phase (Federal)	1,575,000
Feasibility Phase (Non-Federal)	1,425,000

This study is authorized under Section 209 of the Rivers and Harbors Act of 1962 (Public Law 87-874).

The feasibility study is scheduled for completion in TBD.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is $351,000. This amount will be used to perform work on the project as follows: continue feasibility study activities.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ $378,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. Part of this amount will be used to execute the FCSA and initiate feasibility study activities, the remainder will be carried over into FY 2014.

$0 was rescinded from the project.

$0 was transferred to the Flood Control and Coastal Emergencies (FCCE).

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
West Maui Watershed, Maui, HI Honolulu District	2,594,000	385,000	49,000	399,000	0 2/3/	538,000 1/	1,223,000

The West Maui watershed includes the 5 watersheds from Kaanapali to Honolua on the island of Maui, Hawaii (24,000 acres). Coral reefs provide $360 million annually in net economic benefits to Hawaii. Coral reefs support complex food systems, diverse biological life, recreation, commerce, shoreline protection, and cultural resources. In West Maui, nearly one-fourth of all living corals have been lost in the last 13 years. Without dramatic steps to restore favorable conditions, reefs statewide risk rapid degradation. Causes of coral reef decline are complex and not yet fully understood. However, land-based pollution is known to be a serious threat to coral reef ecosystems. Increased sedimentation associated with loss of forest land, historical agriculture practices, stream channelization, and rapid development has clearly impacted coral reef health. The study area supports 60 Endangered Species Act (ESA) listed terrestrial and marine species and 62 ESA designated critical habitat units. The Hawaiian Humpback Whale National Marine Sanctuary and two state designated Marine Protected Areas lie within the study area. By reducing land-based pollution in a more comprehensive manner, coral reef ecosystem functions and health and coastal water quality will improve in a way not possible with isolated actions.

The watershed plan will provide a comprehensive and integrated water resource management (IWRM) strategy for the West Maui Ridge to Reef Initiative. The initiative engages various federal and state agencies and organizations in the implementation of actions to reduce the threats of land-based pollution to coral reefs in West Maui. As an action oriented initiative, the State and federal and non-governmental organizations are funding technical studies, public education and on-the-ground actions as they are identified within the comprehensive strategy. Partner agencies include National Oceanic and Atmospheric Administration, Environmental Protection Agency, Department of Interior, Natural Resources Conservation Service, and National Fish and Wildlife Foundation. The West Maui Watershed has been identified as a national priority by the U.S. Coral Reef Task Force, the National Ocean Council, and the federal Interagency Task Force on Climate Change Adaptation – providing an alternative approach to IWRM. The cost share agreement was executed in August 2012.

Available funds are being used in Fiscal Year (FY) 2013 to hold the public scoping meeting, scoping planning charette, complete the problems and opportunities identification and identify and seek concurrence on the final array of alternatives. FY 2014 funds will be used to develop, evaluate and compare alternative approaches and seek concurrence on the tentative selected strategy. The total estimated cost of the assessment is $3,000,000, which will be shared on a 75-25 percent basis by Federal and non-Federal interests.

A summary of the study cost sharing follows:

Total Estimated Study Cost	$3,344,000
Reconnaissance Phase (Federal)	344,000
Feasibility Phase (Federal)	2,250,000
Feasibility Phase (Non-Federal)	750,000

The study is authorized by Sec 729 of the WRDA 86 (PL 99-662) as amended.

The reconnaissance phase was completed in August 2012. The feasibility study is scheduled for completion in TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is $8,000. This amount will be used to perform work on the study as follows: administer Architect-Engineer contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ $481,000 of unobligated FY 2012 funds were carried into FY 2013. This amount will be used to continue feasibility study activities.

$0 was rescinded from the project.

$0 was transferred to the Flood Control and Coastal Emergencies (FCCE).

OPERATION AND MAINTENANCE

Key to Abbreviations:

N = Navigation
FRM = Flood Risk Management
Rec = Recreation
Hydro = Hydropower
ES = Environmental Stewardship
WS = Water Supply

ALASKA

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Anchorage Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, July 3, 1958, Public Law 85-500, (Anchorage Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) and 2) The Consolidated Appropriations Act 2005, Division C – Energy and Water Development Appropriations, Public Law 108-447

LOCATION AND DESCRIPTION: The Port of Anchorage is located in Anchorage, Alaska at the northern end of Cook Inlet in south central Alaska. The project accommodates three dry cargo berths and two petroleum handling facilities. It serves as Alaska's regional and provides services to approximately 90% of the total population of Alaska, including five military bases. Anchorage Harbor has been designated a national strategic port by the Department of Defense and is also used by military vessels. The Corps of Engineers has dredged the Port of Anchorage annually at full federal expense to its authorized depth of -35 feet mean lower low water since the 1960's. Vessels with drafts up to 40 feet dock during high tide and offload their cargo, thus requiring full project depth year around.

CONFERENCE AMOUNT FOR FY 2013: $13,930,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $9,431,000 O: $0.0 T: $9,431,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $9,431,000 will be used to perform annual maintenance dredging to remove an estimated 1.4 million cubic yards of glacial silts and sands from the existing and newly expanded project area. The annual dredging period is from 1 May through 1 November. These funds will sustain navigation performance by maintaining the availability and reliability of Anchorage Harbor that receives 90% of all goods entering the State of Alaska.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Port of Anchorage is expanding the intermodal facility that will move the dock 400 feet seaward and lengthen it by about 5,000 ft, nearly tripling its length, and doubling the uplands storage capacity. The dock expansion has increased the dredging area maintained by the Corps from approximately 115 acres to 202 acres. An Environmental Assessment and Finding of no Significant Impact was completed in August 2008.

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $100,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Chena River Lakes Flood Control Project, North Pole, Alaska

AUTHORIZATION: Flood Control Act of 13 August 1968, Public Law 90-483.

LOCATION AND DESCRIPTION: The Chena River Lakes Flood Control Project is located in North Pole, Alaska approximately 17 mile east of Fairbanks, Alaska. The 20,000-acre project consists of an 8-mile long zoned rock-filled dam that provides flood protection to Fairbanks, Alaska, and adjacent areas including Fort Wainwright, from recurring flood damage from the Chena River.

CONFERENCE AMT. FOR FY 2013: $3,328,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $755,000 O: $2,166,000 T: $2,921,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,121,000 is requested to provide annual project operations, maintenance, and periodic inspections for flood control. Approximately $1,760,000 is required for dam operations and $361,000 will be used to correct dam safety deficiencies. Operation of the dam at the minimum level of service prevents downstream flooding on average about once each year with average annual damages prevented of $9,231,000.

REC: $345,000 to perform routine management of the non-leased recreational lands and fund the annual law enforcement cooperation agreement with the local police department. Funding of this increment prevents increased vandalism and prevents exposure of the Government to unwanted safety liabilities related to use of public lands.

H: N/A

ES: $455,000 to perform routine environmental compliance and stewardship activities relating to the natural resources managment program. Funding of this increment will decrease the likelihood of citations and notice of violations for improper storage of hazardous materials, improper or unsafe working conditions, or environmental damage due to poor/insufficient maintenance of project features.

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $100,000. This amount will be used to perform the work as follows: Complete the administration of the FY 2013 service and repair contracts.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Cook Inlet Shoals (Cook Inlet Navigation Channel), Alaska

AUTHORIZATION: (1) Water Resources Development Act of 1996 (Public Law 104-303, 104th Congress) authorizes the expenditure of $5,700,000 subject to the report of the Chief of Engineers. (2) The Energy and Water Development Appropriations Act, 1999 (Public Law 105-245, Oct. 7 1998) increases the project total not to exceed $12,600,000. (3) Energy and Water Appropriations Act, 2005, allows the Secretary to modify the channel to run the entire length of Fire Island Range and Point Woronzof Range to a depth of - 45 feet mean lower low water.

LOCATION AND DESCRIPTION: Cook Inlet is a 250-mile long estuary in south-central Alaska that serves as the navigation corridor for bulk goods and supplies transported to the Port of Anchorage. The construction of the original project authorization was completed in September 2000 and provides a navigation channel approximately 11,000 feet long by 1,100 feet wide and maintained to a project depth of -38 feet mean lower low water. The work authorized in the 2005 Energy and Water Appropriations Act awaits cost share study funding from the sponsor. The Port of Anchorage is a Department of Defense designated national strategic port and provides services to approximately 90% of the total population of Alaska, including five military bases. Vessels with drafts up to 40 feet travel the channel to the Port of Anchorage.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $6,188,000 O: $0.0 T: $6,188,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $6,188,000 will be used to prepare contract plans and specifications for maintenance dredging, award a maintenance dredging contract, and perform dredging.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The 2012 condition survey found the channel depth 8 to 10 feet above the project depth, with a volume of 4.1 million cubic yards that require removal.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Dillingham Harbor, Alaska

AUTHORIZATION: Rivers and Harbors Act, July 3, 1958, Section 101, Public Law 85-500.

LOCATION AND DESCRIPTION: Dillingham Harbor is located approximately 350 miles south west of Anchorage at the head of Nushagak Bay and at the confluence of the Wood and Nushagak Rivers in Bristol Bay. The City borders the largest remaining wild salmon fishery in the world. Dillingham Harbor provides half-tide access and all-tide moorage for about 320 commercial fishing and recreational craft. Commercial salmon fishing is the cornerstone of the community's economy with subsistence hunting and fishing continuing as vital local activities. The harbor is also a harbor of refuge, providing both moorage and an alternate landing area for lighterage vessels. All transportation to the area is by water or air.

CONFERENCE AMT. FOR FY 2013: $1,000,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $1,080,000 O: $0 T: $1,080,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $1,080,000 will be used to continue annual maintenance dredging of the harbor and entrance channel to the authorized depth of +2 feet mean lower low water. This funding would maintain reliability and availability to commercial and subsistence fishing vessels to off-load fish products and re-supply for continued fishing.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $45,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Homer Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, July 3, 1958, Section 101, Public Law 85-500, (Homer Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) as adopted and 2) Amendment to the Alaska Omnibus Act, August 19, 1964, Public Law 88-451.

LOCATION AND DESCRIPTION: Homer Harbor is located in south-central Alaska, approximately 230 road miles from Anchorage, AK, near the southern tip of the Kenai Peninsula. Homer Harbor provides sheltered moorage for approximately 1,525 vessels. The project extends the fishing season an extra four months each year and is an integral part of Homer's economy. Annual commercial tonnage for the harbor is 0.1 million tons.

CONFERENCE AMT. FOR FY 2013: $467,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $487,000 O: $0.0 T: $487,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $487,000 will be used to perform annual maintenance dredging of the harbor entrance channel. This will enable commercial and subsistence fishing vessels harbor to off-load fish products for processing and be able to re-supply for continued operations. These funds would assure the continued availability of this critical harbor of refuge for the Cook Inlet commercial and subsistence fishing fleet. Tug and barge operations, which support freight delivery and oil exploration, will continue. Home-ported in Homer Harbor are the U.S. Coast Guard Cutter *Roanoke Island* and the U.S. Fish and Wildlife's Research Vessel *Tiglax*; dredging will allow these vessels to continue operating in the harbor without interruption.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date of this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $50,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Lowell Creek, Seward, Alaska

AUTHORIZATION: (1) Public Resolution No. 52, 9 February 1927 (69th Congress) provided for the construction of an intake dam and timber flume through the city of Seward. (2) Public Law No. 336, 14 February 1933 provided for the maintenance of the authorized project. (3) Flood Control Act, 25 August 1937 (House Doc. 154, 75th Congress, 1st Session) provided for the construction of a diversion dam 25 feet high and 400 feet long, and for a concrete lined tunnel 10 feet in diameter and 2,070 feet long through Bear Mountain to protect the city of Seward from the floodwaters of Lowell Creek. (4) Water Resources Development Act, 2007, Section 5032, Lowell Creek Tunnel, requires the Secretary to assume responsibility for the long-term maintenance and repair of the Lowell Creek tunnel for a period of 15 years or until an alternative method of flood diversion is constructed, whichever is earlier. The Secretary shall conduct a study to determine whether an alternative method of flood diversion in Lowell Canyon is feasible and shall carry out the alternative method. The Federal share of the cost of carrying out an alternative method under shall be the same as the Federal share of the cost of the construction of the Lowell Creek Tunnel.

LOCATION AND DESCRIPTION: Lowell Creek is located in the city of Seward, which is 125 miles south of Anchorage by highway. The lower reaches of Lowell Creek were diverted away from the city of Seward, which sits on its alluvial fan, by this project. The original project consists of a dam, 400 long with a maximum crest height of 25 feet and a tunnel to divert the creek away from the city and through Bear Mountain into Resurrection Bay. The tunnel is 10 feet in diameter, 2,068 feet long, and exits to a concrete flume above the ocean's edge.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $150,000 O: $0.0 T: $150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $150,000 will be used to prepare plans and specifications and environmental documents for repairs of the concrete in the tunnel. An annual inspection will be performed. The 2012 inspection report noted continued deterioration of concrete through wear and cracking.

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Ninilchik Harbor, Alaska

AUTHORIZATION: Rivers and Harbors Act, July 3, 1958, Public Law 85-500, (Ninilchik Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) as adopted.

LOCATION AND DESCRIPTION: The Ninilchik Harbor is located in Ninilchik, Alaska, approximately 100 air miles southwest of Anchorage on the Kenai Peninsula. The small boat basin provides protected moorage with half-tide access for 32 vessels. The basin and channel also provide access for Cook Inlet commercial fishing boats to unload their catch and take on supplies. The basin is an important harbor-of-refuge for lower Cook Inlet.

CONFERENCE AMT. FOR FY 2013: $454,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $400,000 O: $0.0 T: $400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $400,000 will be used to perform annual maintenance dredging of the basin and entrance channel. Funding will assure access for the commercial and subsistence fishing fleet to this critical harbor of refuge.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $5,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Nome Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, August 8, 1917 (House Doc. 1932, 64th Congress, 2nd Session) as adopted by Public Law No. 37; and 2) Water Resources Development Act 1999, Section 101(a) (3), Public Law 106-53.

LOCATION AND DESCRIPTION: Nome Harbor is located on the southern coast of the Seward Peninsula in western Alaska. The city is approximately 540 miles northwest of Anchorage, and is the transportation and commerce center for Northwest Alaska. The recently completed improvement project consists of a new 3,600 foot-long entrance channel protected by a 3,025-foot long rubblemound breakwater, a new causeway bridge, a 270-foot long rubblemound breakwater extension on the existing causeway, and sediment collection basins. The harbor provides protected moorage for the existing 170 vessels as well as a fleet of 40 barges and transshipment vessels providing cargo and fuel service to the region.

CONFERENCE AMT. FOR FY 2013: $1,151,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $1,244,000 O: $0.0 T: $1,244,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $1,244,000 - Funds will be used to perform annual maintenance dredging. Funding will assure 90% availability for this critical harbor of refuge, subsistence, and major commercial distribution and transfer center for Northwest Alaska and Seward Peninsula.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $39,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

HAWAII

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Barbers Point Deep Draft Harbor, Oahu, Hawaii

AUTHORIZATION: River and Harbor Act, October 27, 1965, PL 89-298

LOCATION AND DESCRIPTION: The Barbers Point Harbor is a Federally authorized harbor, completed in 1985 and located on the Ewa plain along the southwestern coast of the island of Oahu, approximately 20 road miles west of Honolulu.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $206,000 O: $0 T: $206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: $206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Barbers Point Harbor, Pacific Regional Visitor Center, Oahu, Hawaii

AUTHORIZATION: River and Harbor Act, October 27, 1965, Public Law 89-298.

LOCATION AND DESCRIPTION: The Barbers Point Harbor, Pacific Regional Visitor Center is located in Honolulu, Hawaii on the second floor of historic Battery Randolph at Fort DeRussy adjacent to Waikiki Beach on the island of Oahu. The Pacific Regional Visitor Center is designed to educate the public about the Corps of Engineers and the Corps role in water resource development in the Pacific.

CONFERENCE AMT. FOR FY 2013: $238,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $0 O: $228,000 T: $228,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

REC: $228,000 Funding provides for operation of the Pacific Regional Visitor Center (RVC). The RVC functions as an informational visitor center designed to educate the public of the Corps' work in the Pacific and focuses on the POH's Civil Works Water Resources Development Program. The presentation reflects the historic and ongoing relationship between the military and civil works in the Pacific. The RVC participates in outreach activities such as Earth Day, Public Lands Day and Water Monitoring Day. The RVC reaches over 76,000 visitors a year.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Hilo Harbor, Hawaii, HI

AUTHORIZATION: The project was authorized under the River and Harbor Act of 1907 and subsequent work authorized under the River and Harbor Act of 1912 and 1925.

LOCATION AND DESCRIPTION: The Hilo Deep Draft Harbor is located on the northeast coast of the island of Hawaii. The project was completed in 1930 and consists of a 10,080-foot-long breakwater protecting a 35-foot-deep basin. Hilo Harbor is one of the two main commercial ports for the Island of Hawaii.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $206,000 O: $0 T: $206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: $206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Honolulu Harbor, Oahu; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1990.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Honolulu Harbor, Oahu, Hawaii

AUTHORIZATION: The project was authorized by the River and Harbor Acts of 3 March 1905, 8 August 1917, 3 July 1930 and 3 September 1954.

LOCATION AND DESCRIPTION: Honolulu Harbor is located on the southwestern coast of the island of Oahu. The harbor consists of an entrance channel (4.000 feet long, 500 feet wide and 45 feet deep); a main harbor basin (3,300 feet long, 1,520 feet wide and 40 feet deep); a west harbor basin (3,400 feet long, 1,000 feet wide and 40 feet deep); and a connecting channel (400 feet wide and 40 feet deep); and Kalihi Channel (400 feet wide, 23 feet deep).

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $206,000 O: $0 T: $206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: NA

REC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1999**.**

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Kahului Deep Draft Harbor, Maui, Hawaii

AUTHORIZATION: The federal project was authorized by the River and Harbor Acts of 27 July 1916, 25 June 1919, 21 January 1927, and 14 July 1960.

LOCATION AND DESCRIPTION: Kahului Harbor is Maui's only commercial port and is located on the northern coast of the island. The Federal project consists of rubble mound breakwaters on the east and west sides of the harbor, approximately 2,766 and 2,315 feet in length, respectively; an entrance channel 600 feet wide between the breakwaters; and a harbor basin 2,050 feet wide, 2,400 feet long at 35 feet deep.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $206,000 O: $0 T: $206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10 years. Dredging at this project was last completed in February1999.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Nawiliwili Deep Draft Harbor, Kauai, Hawaii

AUTHORIZATION: The project was authorized under the River and Harbor Act of 2 March 1919 and September 1954.

LOCATION AND DESCRIPTION: Nawiliwili Harbor is located on the southeast coast of the island of Kauai and is the island's principal commercial harbor. The harbor consists of a breakwater 2,045 feet in length, and an S-shaped entrance channel 40 feet deep with a minimum width of 600 feet and a length of 2,400 feet.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $206,000 O: $0 T: $206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: $206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; and Kahului Deep Draft Harbor, Maui. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10 years. Dredging at this project was last completed in FY1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PACIFIC OCEAN DIVISION

PACIFIC OCEAN DIVISION
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JUSTIFICATION OF ESTIMATE

INVESTIGATIONS

ALASKA

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
Alaska Regional Ports, AK Tier 1, Alaska Deep Draft Arctic Ports Alaska District	3,161,000	1,411,000	250,000	0	300,000 2/	500,000 1/	700,000
Alaska Regional Ports, AK Tier 2, Point Mackenzie Shoal Alaska District (completion)	1,000,000	0	0	750,000	0 2/3/	250,000 1/	0

The Alaska Regional Ports study focuses on evaluating the problems, opportunities, and needs for regional ports throughout the State of Alaska. Navigation access to local ports is critical to all the 200 plus coastal communities in Alaska, which are primarily served by a regional port system where small barges transship cargo from ocean going barges and small freighters. Since there are few connecting roads and the economy is primarily based on commercial fishing and natural resources development, consideration of regional ports is needed due to the economic, social and cultural dependence these communities have on marine resources and waterborne transportation. The Alaska Department of Transportation and Public Facilities (ADOT&PF) requested the study for harbor improvements in Alaska that focuses on developing a regional ports system that would serve as an integrated intermodal system of importance to the state, the nation, and global markets.

The reconnaissance study was completed in May 2008 and determined that additional systems-based feasibility studies appear to be in the Federal interest and to warrant investigation of regional navigation improvements. The Feasibility Cost Sharing Agreement was signed on 21 September 2009 with the Alaska Department of Transportation and Public Facilities (ADOT&PF). Phase I of the Feasibility Study culminated with the November 18, 2010 Alaska Regional Ports Conference that was attended by harbor users, local, state, and Federal government agencies.

As resource extraction demands increase for the Arctic and the sea ice continues to melt, deep draft commercial vessels usage of the Northern Sea Route for passage between Pacific and Atlantic ports has been increasing exponentially. A planning charette was held in May 2011 that focused attention on the need for deep-draft port capability in the Arctic. As natural resource extraction becomes more economically feasible, harbors of refuge would be needed to provide safe moorage and tug assistance to vessels in distress. Regional ports would provide a comprehensive harbor network for national defense support and safe moorage for the fishing fleet and small commercial ships. The Alaska Regional Ports Study is being conducted on a tiered approach.

Tier 1 Agreement, Alaska Deep-Draft Arctic Ports, Alaska. As an Arctic Nation, the Alaska Department of Transportation and Public Facilities (ADOT&PF) requested a Tier 1 Agreement to study the problems, opportunities, and need to develop a deep-draft port system in the Arctic. Vessel traffic in the Arctic is on the rise; oil and gas industry activities on the Outer Continental Shelf began in the summer 2012; cruise liners, military craft, tugs and barges, and fishing vessels are all present and active in the Arctic. There are significant safety concerns as well as implications related to the Nation’s economy, environment, and national security. The study is primarily focusing on transportation/extraction of resources and minerals, with particular interest in involving a Public-Private Partnership with industry and the state. The Feasibility Cost Sharing Agreement was executed in December 2011.

Tier 2 Agreement, Point MacKenzie Shoal, Alaska. Based on concerns expressed by the shipping industry, the ADOT&PF requested a Tier 2 Agreement to study the Point MacKenzie Shoal which is encroaching on the navigation channel serving both the Port of Anchorage and Port Mackenzie. The scope of the investigation is to determine the composition and consistency of the Point MacKenzie Shoal and to provide a long-term solution to the problems posed by the growth of the shoal. The Feasibility Cost Sharing Agreement for Tier 2 was executed on 14 June 2012. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$7,434,000
Reconnaissance Phase (Federal)	888,000
Feasibility Phase (Federal)	3,273,000
Feasibility Phase (Non-Federal)	3,273,000

Tier 1 (Alaska Deep Draft Arctic Ports)

Total Estimated Study Cost	$5,434,000
Reconnaissance Phase (Federal)	888,000
Feasibility Phase (Federal)	2,273,000
Feasibility Phase (Non-Federal)	2,273,000

Tier 2 (Point Mackenzie Shoal)

Total Estimated Study Cost	$2,000,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,000,000
Feasibility Phase (Non-Federal)	1,000,000

Fiscal Year (FY) 2013 funds will be used to complete the Tier 1 (Alaska Deep-Draft Arctic Ports) potential Arctic port site assessment and continue site specific Arctic port investigations. FY 2014 funds would be used to continue the Tier 1 (Alaska Deep Draft Ports) site specific Arctic port investigations and complete the Tier 2 (Point MacKenzie Shoal) shoal investigations.

The study is being conducted under the Study Resolution on Rivers and Harbors in Alaska adopted on 2 December 1970 by the Committee on Public Works of the U.S. House of Representatives.

The Tier 1 (Alaska Deep Draft Arctic Ports) feasibility completion is TBD. The Tier 2 (Point MacKenzie Shoal) study is scheduled for completion in FY 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ $667,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. This amount will be used to continue investigations of the Point MacKenzie Shoal.

$0 rescinded from the project.

$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Little Diomede SBH, AK Alaska District (completion)	1,893,000	1,543,000	200,000	50,000	0 2/3/	100,000 1/	0

The City of Diomede lies on the west coast of Little Diomede Island, Alaska, 2.5 miles from Big Diomede Island, Russia. The two Diomede islands lie in the center of the Bering Straits, 135 miles northwest of Nome (the nearest harbor). Access to Diomede is limited to weekly helicopter service during the summer open water periods and intermittent fixed wing aircraft during the winter, which is dependent upon construction of an ice runway. Both types of service are very weather dependent. Service is also very limited in the size and type of goods that can be shipped. Diomede has no protected harbor, and regular freight barges have ceased delivering cargo because of the high risk of barge damage and weather delays. Some independent barge operators will go to Diomede for premium fees. New construction, equipment, major repairs to infrastructure, and even replacement of household appliances are impacted and delayed because of increased transportation costs. During some winters, an ice runway can be built on the sea ice for fixed wing aircraft, which can deliver some larger items, but at exorbitant costs. A harbor would greatly reduce the cost of goods and increase access to the village. In addition, coastal storms damage the infrastructure, and there are no alternatives for relocating the infrastructure. A cost-sharing agreement for the feasibility study was signed on November 6, 2006 with Kawerak, Inc. (regional non-profit tribal corporation) as agents for the Native Village of Diomede, and the study is ongoing. The community of Diomede is almost 94% Alaska Native. Most residents rely on subsistence for survival, most of which comes from the sea, and over 35% of the residents are defined as being in poverty.

The estimated cost of the feasibility phase is $3,168,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Fiscal Year (FY) 2012 funds were used to perform Phase 2 of the feasibility study. No funds were received in FY 2013, unobligated funds carried in from FY 2012 are being used to continue feasibility study activities. FY 2014 funds will be used to complete the feasibility report.

Total Estimated Study Cost	$3,477,000
Reconnaissance Phase (Federal)	309,000
Feasibility Phase (Federal)	1,584,000
Feasibility Phase (Local)	1,584,000

The study is being conducted under the Study Resolution on Rivers and Harbors in Alaska adopted on 2 December 1979 by the Committee on Public Works of the U.S. House of Representatives.

The feasibility study is scheduled for completion in FY 2014.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ $121,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. This amount will be used to continue feasibility study activities.

$0 rescinded from the project.

$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Matanuska Watershed, AK Alaska District	3,812,000	1,517,000	499,000	296,000	100,000 2/	200,000 1/	1,200,000

The Matanuska-Susitna Watershed is located about 50 miles north of Anchorage, Alaska in the Matanuska-Susitna Borough. The Matanuska-Susitna Borough has experienced increased development in recent years (~4%/year) with resulting concerns about flooding, stream bank erosion, aquatic habitat degradation, and overall health within their watershed. The ongoing collaborative study includes partners such as the Matanuska Watershed Coalition, The Native Village of Chickaloon, and the Mat-Su Salmon Partnership, a pilot project under the National Fish Habitat Initiative. The study is investigating water resource related concerns in the Matanuska and Susitna watershed and develop a comprehensive water resources plan to provide the Borough, Federal and State agencies with a planning tool that would assist in making better decisions related to future development within the watershed. In a collaborative effort with District Regulatory personnel, USEPA, and USFWS, the watershed plan will provide a comprehensive approach to managing wetland impacts and evaluating wetland quality so that appropriate mitigation can be applied on a consistent basis throughout the watershed. A Feasibility Cost Sharing Agreement was executed on 27 September 2007 with Matanuska-Susitna Borough.

Fiscal Year (FY) 2012 were used to continue the feasibility study and gather data needed to evaluate the water resource needs of the watershed. FY 2013 funding are being used to continue wetland mapping and application of functional assessment process. FY 2014 funds will be used to initiate development of the watershed plan requirements.

Total Estimated Study Cost	$7,329,000
Reconnaissance Phase (Federal)	295,000
Feasibility Phase (Federal)	3,517,000
Feasibility Phase (Local)	3,517,000

The study is being conducted under the Rivers and Harbors in Alaska Resolution, 2 December 1970. The feasibility study completion date is TBD.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

$0 rescinded from the project.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

HAWAII

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Ala Wai Canal, Oahu, HI Honolulu District	4,830,000	3,085,000	(1,000)	383,000	400,000 2/	400,000 1/	563,000

The Ala Wai watershed encompasses more than 19 square miles on the island of Oahu. The study area extends from the ridge of the Koolau Mountains to the nearshore waters of Malama Bay and includes Makiki, Manoa and Palolo streams. These streams all drain to the Ala Wai Canal, a two-mile long, man-made waterway constructed during the 1920's to drain extensive coastal wetlands. Due to development and alterations over the years, residents of the Ala Wai watershed are at risk to flood damages and the aquatic ecosystem is significantly degraded.

Approximately 3,000 properties are at risk of damage from a 100-year flood event under existing conditions. In 1965, 1967, and 1992, Waikiki experienced severe flooding. In 2004, Manoa stream overflowed its banks and caused over $80M in damages to property and irreplaceable documents in the University of Hawaii's library. In 2006, the Makiki neighborhood also experienced heavy flooding.

The Ala Wai watershed supports important habitat for marine, estuarine and freshwater ecosystems. Endemic amphidromous species such as native gobies and freshwater shrimp are dependent upon healthy streams, estuaries and marine habitat as they transit through these systems during their life-cycles. Alterations to the stream channel over time have altered stream flow, making the streams impassable for much of the year. Urban uses and activities further exacerbate ecosystem degradation through loading of sediment and pollutants that impair fish habitat and health. As a result, the streams and the Canal are included on the Environmental Protection Agency Section 303(d) List of Impaired Waters.

The project is a cooperative effort with Federal, State and local agencies. The project goal is to improve the overall quality of the Ala Wai watershed. Based on recent flood events and a re-scoping charette held in October 2012, the primary focus has shifted to Flood Risk Management with ecosystem restoration in specific reaches to improve aquatic habitat.

The feasibility cost sharing agreement was executed in April 2001 with the State Department of Land and Natural Resources and subsequently amended in August 2006 and November 2012 for a total study cost of $9,258,000. In October 2012, a re-scoping charette was held to ensure compliance with US Army Corps fo Engineers' Specific, Measurable, Attainable, Risk Informed, Timely planning initiative. The estimated total cost to complete the study is $2,269,000. The Draft Feasibility/Environmental Impact Statement (EIS) is scheduled for Fiscal Year (FY) 2014 with the Chief's Report scheduled for FY 2015 or earlier. FY 2013 funds are being used to receive concurrence on the final array of alternatives and identify the tentatively selected plan. FY 2014 funds will be used to seek concurrence on the tentatively selected plan, publish the Draft Feasibility/EIS Report, conduct concurrent public, policy, technical reviews, including Independent External Peer Review (IEPR).

The total estimated cost of the feasibility phase is shared on a 50-50 percent basis by Federal and non-Federal interests, except for the IEPR which is funded at 100% federal cost and is estimated to cost $152,000. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$9,383,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	4,705,000
Feasibility Phase (Non-Federal)	4,553,000

The study is authorized under Section 209 of the Rivers and Harbors Act of 1962, Harbors and Rivers in Hawaii.

The reconnaissance phase was completed in August 1999. The feasibility phase is scheduled for completion in TBD.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

$1,000 was rescinded from the project in FY 2011

$408,000 was transferred to the Flood Control and Coastal Emergencies (FCCE) in FY 2011

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Hilo Harbor Modifications, Hawaii, HI	1,671,000	96,000	0	351,000	0 2/3/	775,000 1/	449,000
Honolulu District							

Hilo Harbor is located on the northeast coast of the island of Hawaii, the State of Hawaii's southernmost island. The harbor is approximately two miles from the business district of Hilo, the island's city and county seat and is the principal commercial port for the island (the second being Kawaihae Harbor on the west side of the island) and the fourth largest port in the State in terms of total goods shipped. The harbor provides a wide range of maritime facilities and services including the island's only pier large enough to accommodate visiting cruise ships. Among the commodities moving through the harbor are liquid bulk cargo, including all of the island's petroleum products, container cargo, and new vehicles.

Hilo Harbor was constructed by the Corps of Engineers in 1930 and consists of a 10,080-foot long breakwater protecting a 35-foot deep turning basin. Vessel traffic is currently resulting in maximum usage of the existing commercial harbor facilities. The State of Hawaii, Department of Transportation, Harbors Division (DOT-Harbors) recently completed an updated master plan for Hilo Harbor which identified the need for modification or expansion of the existing harbor to accommodate larger vessels with the intent of increasing operating efficiency at the harbor and reducing cargo transportations costs. The master plan recommended enlarging the turning basin to accommodate future construction and/or extension of piers, as well as use of the area by larger ships. The existing harbor is unable to accommodate larger vessels without significant grounding risk. Additionally, adverse surge conditions during winter months often preclude users from safely mooring and operating their vessels. DOT-Harbors is the sponsor for this project. In December 2011, DOT-Harbors provided a letter of intent indicating that they fully understand the feasibility cost-sharing requirements. A final 905(b) was approved in July 2012. A Feasibility Cost Share Agreement (FCSA) is scheduled to be executed in Fiscal Year (FY) 2013. The reconnaissance phase is scheduled for completion in FY 2013.

FY 2013 funds would be used to initiate the feasibility phase upon execution of the FCSA in FY 2013. FY 2014 funds will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests, with the exception of the Independent External Peer Review (IEPR). The estimated cost of the IEPR is $150,000 and will be fully Federal funded. A summary of the study cost sharing follows:

Total Estimated Study Cost	$3,096,000
Reconnaissance Phase (Federal)	96,000
Feasibility Phase (Federal)	1,575,000
Feasibility Phase (Non-Federal)	1,425,000

This study is authorized under Section 209 of the Rivers and Harbors Act of 1962 (Public Law 87-874).

The feasibility study is scheduled for completion in TBD.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is $351,000. This amount will be used to perform work on the project as follows: continue feasibility study activities.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ $378,000 of unobligated appropriations were carried into FY 2013 for use on this study effort. Part of this amount will be used to execute the FCSA and initiate feasibility study activities, the remainder will be carried over into FY 2014.

$0 was rescinded from the project.

$0 was transferred to the Flood Control and Coastal Emergencies (FCCE).

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
West Maui Watershed, Maui, HI Honolulu District	2,594,000	385,000	49,000	399,000	0 2/3/	538,000 1/	1,223,000

The West Maui watershed includes the 5 watersheds from Kaanapali to Honolua on the island of Maui, Hawaii (24,000 acres). Coral reefs provide $360 million annually in net economic benefits to Hawaii. Coral reefs support complex food systems, diverse biological life, recreation, commerce, shoreline protection, and cultural resources. In West Maui, nearly one-fourth of all living corals have been lost in the last 13 years. Without dramatic steps to restore favorable conditions, reefs statewide risk rapid degradation. Causes of coral reef decline are complex and not yet fully understood. However, land-based pollution is known to be a serious threat to coral reef ecosystems. Increased sedimentation associated with loss of forest land, historical agriculture practices, stream channelization, and rapid development has clearly impacted coral reef health. The study area supports 60 Endangered Species Act (ESA) listed terrestrial and marine species and 62 ESA designated critical habitat units. The Hawaiian Humpback Whale National Marine Sanctuary and two state designated Marine Protected Areas lie within the study area. By reducing land-based pollution in a more comprehensive manner, coral reef ecosystem functions and health and coastal water quality will improve in a way not possible with isolated actions.

The watershed plan will provide a comprehensive and integrated water resource management (IWRM) strategy for the West Maui Ridge to Reef Initiative. The initiative engages various federal and state agencies and organizations in the implementation of actions to reduce the threats of land-based pollution to coral reefs in West Maui. As an action oriented initiative, the State and federal and non-governmental organizations are funding technical studies, public education and on-the-ground actions as they are identified within the comprehensive strategy. Partner agencies include National Oceanic and Atmospheric Administration, Environmental Protection Agency, Department of Interior, Natural Resources Conservation Service, and National Fish and Wildlife Foundation. The West Maui Watershed has been identified as a national priority by the U.S. Coral Reef Task Force, the National Ocean Council, and the federal Interagency Task Force on Climate Change Adaptation – providing an alternative approach to IWRM. The cost share agreement was executed in August 2012.

Available funds are being used in Fiscal Year (FY) 2013 to hold the public scoping meeting, scoping planning charette, complete the problems and opportunities identification and identify and seek concurrence on the final array of alternatives. FY 2014 funds will be used to develop, evaluate and compare alternative approaches and seek concurrence on the tentative selected strategy. The total estimated cost of the assessment is $3,000,000, which will be shared on a 75-25 percent basis by Federal and non-Federal interests.

A summary of the study cost sharing follows:

Total Estimated Study Cost	$3,344,000
Reconnaissance Phase (Federal)	344,000
Feasibility Phase (Federal)	2,250,000
Feasibility Phase (Non-Federal)	750,000

The study is authorized by Sec 729 of the WRDA 86 (PL 99-662) as amended.

The reconnaissance phase was completed in August 2012. The feasibility study is scheduled for completion in TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for this study effort is $8,000. This amount will be used to perform work on the study as follows: administer Architect-Engineer contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ $481,000 of unobligated FY 2012 funds were carried into FY 2013. This amount will be used to continue feasibility study activities.

$0 was rescinded from the project.

$0 was transferred to the Flood Control and Coastal Emergencies (FCCE).

OPERATION AND MAINTENANCE

Key to Abbreviations:

N = Navigation
FRM = Flood Risk Management
Rec = Recreation
Hydro = Hydropower
ES = Environmental Stewardship
WS = Water Supply

ALASKA

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Anchorage Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, July 3, 1958, Public Law 85-500, (Anchorage Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) and 2) The Consolidated Appropriations Act 2005, Division C – Energy and Water Development Appropriations, Public Law 108-447

LOCATION AND DESCRIPTION: The Port of Anchorage is located in Anchorage, Alaska at the northern end of Cook Inlet in south central Alaska. The project accommodates three dry cargo berths and two petroleum handling facilities. It serves as Alaska's regional and provides services to approximately 90% of the total population of Alaska, including five military bases. Anchorage Harbor has been designated a national strategic port by the Department of Defense and is also used by military vessels. The Corps of Engineers has dredged the Port of Anchorage annually at full federal expense to its authorized depth of -35 feet mean lower low water since the 1960's. Vessels with drafts up to 40 feet dock during high tide and offload their cargo, thus requiring full project depth year around.

CONFERENCE AMOUNT FOR FY 2013: $13,930,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $9,431,000 O: $0.0 T: $9,431,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $9,431,000 will be used to perform annual maintenance dredging to remove an estimated 1.4 million cubic yards of glacial silts and sands from the existing and newly expanded project area. The annual dredging period is from 1 May through 1 November. These funds will sustain navigation performance by maintaining the availability and reliability of Anchorage Harbor that receives 90% of all goods entering the State of Alaska.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Port of Anchorage is expanding the intermodal facility that will move the dock 400 feet seaward and lengthen it by about 5,000 ft, nearly tripling its length, and doubling the uplands storage capacity. The dock expansion has increased the dredging area maintained by the Corps from approximately 115 acres to 202 acres. An Environmental Assessment and Finding of no Significant Impact was completed in August 2008.

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $100,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Chena River Lakes Flood Control Project, North Pole, Alaska

AUTHORIZATION: Flood Control Act of 13 August 1968, Public Law 90-483.

LOCATION AND DESCRIPTION: The Chena River Lakes Flood Control Project is located in North Pole, Alaska approximately 17 mile east of Fairbanks, Alaska. The 20,000-acre project consists of an 8-mile long zoned rock-filled dam that provides flood protection to Fairbanks, Alaska, and adjacent areas including Fort Wainwright, from recurring flood damage from the Chena River.

CONFERENCE AMT. FOR FY 2013: $3,328,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $755,000 O: $2,166,000 T: $2,921,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,121,000 is requested to provide annual project operations, maintenance, and periodic inspections for flood control. Approximately $1,760,000 is required for dam operations and $361,000 will be used to correct dam safety deficiencies. Operation of the dam at the minimum level of service prevents downstream flooding on average about once each year with average annual damages prevented of $9,231,000.

REC: $345,000 to perform routine management of the non-leased recreational lands and fund the annual law enforcement cooperation agreement with the local police department. Funding of this increment prevents increased vandalism and prevents exposure of the Government to unwanted safety liabilities related to use of public lands.

H: N/A

ES: $455,000 to perform routine environmental compliance and stewardship activities relating to the natural resources managment program. Funding of this increment will decrease the likelihood of citations and notice of violations for improper storage of hazardous materials, improper or unsafe working conditions, or environmental damage due to poor/insufficient maintenance of project features.

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $100,000. This amount will be used to perform the work as follows: Complete the administration of the FY 2013 service and repair contracts.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Cook Inlet Shoals (Cook Inlet Navigation Channel), Alaska

AUTHORIZATION: (1) Water Resources Development Act of 1996 (Public Law 104-303, 104th Congress) authorizes the expenditure of $5,700,000 subject to the report of the Chief of Engineers. (2) The Energy and Water Development Appropriations Act, 1999 (Public Law 105-245, Oct. 7 1998) increases the project total not to exceed $12,600,000. (3) Energy and Water Appropriations Act, 2005, allows the Secretary to modify the channel to run the entire length of Fire Island Range and Point Woronzof Range to a depth of - 45 feet mean lower low water.

LOCATION AND DESCRIPTION: Cook Inlet is a 250-mile long estuary in south-central Alaska that serves as the navigation corridor for bulk goods and supplies transported to the Port of Anchorage. The construction of the original project authorization was completed in September 2000 and provides a navigation channel approximately 11,000 feet long by 1,100 feet wide and maintained to a project depth of -38 feet mean lower low water. The work authorized in the 2005 Energy and Water Appropriations Act awaits cost share study funding from the sponsor. The Port of Anchorage is a Department of Defense designated national strategic port and provides services to approximately 90% of the total population of Alaska, including five military bases. Vessels with drafts up to 40 feet travel the channel to the Port of Anchorage.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $6,188,000 O: $0.0 T: $6,188,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $6,188,000 will be used to prepare contract plans and specifications for maintenance dredging, award a maintenance dredging contract, and perform dredging.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The 2012 condition survey found the channel depth 8 to 10 feet above the project depth, with a volume of 4.1 million cubic yards that require removal.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Dillingham Harbor, Alaska

AUTHORIZATION: Rivers and Harbors Act, July 3, 1958, Section 101, Public Law 85-500.

LOCATION AND DESCRIPTION: Dillingham Harbor is located approximately 350 miles south west of Anchorage at the head of Nushagak Bay and at the confluence of the Wood and Nushagak Rivers in Bristol Bay. The City borders the largest remaining wild salmon fishery in the world. Dillingham Harbor provides half-tide access and all-tide moorage for about 320 commercial fishing and recreational craft. Commercial salmon fishing is the cornerstone of the community's economy with subsistence hunting and fishing continuing as vital local activities. The harbor is also a harbor of refuge, providing both moorage and an alternate landing area for lighterage vessels. All transportation to the area is by water or air.

CONFERENCE AMT. FOR FY 2013: $1,000,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $1,080,000 O: $0 T: $1,080,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $1,080,000 will be used to continue annual maintenance dredging of the harbor and entrance channel to the authorized depth of +2 feet mean lower low water. This funding would maintain reliability and availability to commercial and subsistence fishing vessels to off-load fish products and re-supply for continued fishing.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $45,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Homer Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, July 3, 1958, Section 101, Public Law 85-500, (Homer Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) as adopted and 2) Amendment to the Alaska Omnibus Act, August 19, 1964, Public Law 88-451.

LOCATION AND DESCRIPTION: Homer Harbor is located in south-central Alaska, approximately 230 road miles from Anchorage, AK, near the southern tip of the Kenai Peninsula. Homer Harbor provides sheltered moorage for approximately 1,525 vessels. The project extends the fishing season an extra four months each year and is an integral part of Homer's economy. Annual commercial tonnage for the harbor is 0.1 million tons.

CONFERENCE AMT. FOR FY 2013: $467,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $487,000 O: $0.0 T: $487,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $487,000 will be used to perform annual maintenance dredging of the harbor entrance channel. This will enable commercial and subsistence fishing vessels harbor to off-load fish products for processing and be able to re-supply for continued operations. These funds would assure the continued availability of this critical harbor of refuge for the Cook Inlet commercial and subsistence fishing fleet. Tug and barge operations, which support freight delivery and oil exploration, will continue. Home-ported in Homer Harbor are the U.S. Coast Guard Cutter *Roanoke Island* and the U.S. Fish and Wildlife's Research Vessel *Tiglax*; dredging will allow these vessels to continue operating in the harbor without interruption.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date of this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $50,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Lowell Creek, Seward, Alaska

AUTHORIZATION: (1) Public Resolution No. 52, 9 February 1927 (69th Congress) provided for the construction of an intake dam and timber flume through the city of Seward. (2) Public Law No. 336, 14 February 1933 provided for the maintenance of the authorized project. (3) Flood Control Act, 25 August 1937 (House Doc. 154, 75th Congress, 1st Session) provided for the construction of a diversion dam 25 feet high and 400 feet long, and for a concrete lined tunnel 10 feet in diameter and 2,070 feet long through Bear Mountain to protect the city of Seward from the floodwaters of Lowell Creek. (4) Water Resources Development Act, 2007, Section 5032, Lowell Creek Tunnel, requires the Secretary to assume responsibility for the long-term maintenance and repair of the Lowell Creek tunnel for a period of 15 years or until an alternative method of flood diversion is constructed, whichever is earlier. The Secretary shall conduct a study to determine whether an alternative method of flood diversion in Lowell Canyon is feasible and shall carry out the alternative method. The Federal share of the cost of carrying out an alternative method under shall be the same as the Federal share of the cost of the construction of the Lowell Creek Tunnel.

LOCATION AND DESCRIPTION: Lowell Creek is located in the city of Seward, which is 125 miles south of Anchorage by highway. The lower reaches of Lowell Creek were diverted away from the city of Seward, which sits on its alluvial fan, by this project. The original project consists of a dam, 400 long with a maximum crest height of 25 feet and a tunnel to divert the creek away from the city and through Bear Mountain into Resurrection Bay. The tunnel is 10 feet in diameter, 2,068 feet long, and exits to a concrete flume above the ocean's edge.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $150,000 O: $0.0 T: $150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $150,000 will be used to prepare plans and specifications and environmental documents for repairs of the concrete in the tunnel. An annual inspection will be performed. The 2012 inspection report noted continued deterioration of concrete through wear and cracking.

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Ninilchik Harbor, Alaska

AUTHORIZATION: Rivers and Harbors Act, July 3, 1958, Public Law 85-500, (Ninilchik Harbor, AK as included in House Doc. 34, "Cook Inlet and Tributaries, Alaska," 85th Congress, and 1st Session) as adopted.

LOCATION AND DESCRIPTION: The Ninilchik Harbor is located in Ninilchik, Alaska, approximately 100 air miles southwest of Anchorage on the Kenai Peninsula. The small boat basin provides protected moorage with half-tide access for 32 vessels. The basin and channel also provide access for Cook Inlet commercial fishing boats to unload their catch and take on supplies. The basin is an important harbor-of-refuge for lower Cook Inlet.

CONFERENCE AMT. FOR FY 2013: $454,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $400,000 O: $0.0 T: $400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $400,000 will be used to perform annual maintenance dredging of the basin and entrance channel. Funding will assure access for the commercial and subsistence fishing fleet to this critical harbor of refuge.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $5,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Nome Harbor, Alaska

AUTHORIZATION: 1) Rivers and Harbors Act, August 8, 1917 (House Doc. 1932, 64th Congress, 2nd Session) as adopted by Public Law No. 37; and 2) Water Resources Development Act 1999, Section 101(a) (3), Public Law 106-53.

LOCATION AND DESCRIPTION: Nome Harbor is located on the southern coast of the Seward Peninsula in western Alaska. The city is approximately 540 miles northwest of Anchorage, and is the transportation and commerce center for Northwest Alaska. The recently completed improvement project consists of a new 3,600 foot-long entrance channel protected by a 3,025-foot long rubblemound breakwater, a new causeway bridge, a 270-foot long rubblemound breakwater extension on the existing causeway, and sediment collection basins. The harbor provides protected moorage for the existing 170 vessels as well as a fleet of 40 barges and transshipment vessels providing cargo and fuel service to the region.

CONFERENCE AMT. FOR FY 2013: $1,151,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $1,244,000 O: $0.0 T: $1,244,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $1,244,000 - Funds will be used to perform annual maintenance dredging. Funding will assure 90% availability for this critical harbor of refuge, subsistence, and major commercial distribution and transfer center for Northwest Alaska and Seward Peninsula.

FRM: N/A

REC: N/A

H: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this project is $39,000. This amount will be used to perform the work as follows: Complete the administration of the 2013 dredging contract.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

HAWAII

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Barbers Point Deep Draft Harbor, Oahu, Hawaii

AUTHORIZATION: River and Harbor Act, October 27, 1965, PL 89-298

LOCATION AND DESCRIPTION: The Barbers Point Harbor is a Federally authorized harbor, completed in 1985 and located on the Ewa plain along the southwestern coast of the island of Oahu, approximately 20 road miles west of Honolulu.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $206,000 O: $0 T: $206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: $206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Barbers Point Harbor, Pacific Regional Visitor Center, Oahu, Hawaii

AUTHORIZATION: River and Harbor Act, October 27, 1965, Public Law 89-298.

LOCATION AND DESCRIPTION: The Barbers Point Harbor, Pacific Regional Visitor Center is located in Honolulu, Hawaii on the second floor of historic Battery Randolph at Fort DeRussy adjacent to Waikiki Beach on the island of Oahu. The Pacific Regional Visitor Center is designed to educate the public about the Corps of Engineers and the Corps role in water resource development in the Pacific.

CONFERENCE AMT. FOR FY 2013: $238,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $0 O: $228,000 T: $228,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

REC: $228,000 Funding provides for operation of the Pacific Regional Visitor Center (RVC). The RVC functions as an informational visitor center designed to educate the public of the Corps' work in the Pacific and focuses on the POH's Civil Works Water Resources Development Program. The presentation reflects the historic and ongoing relationship between the military and civil works in the Pacific. The RVC participates in outreach activities such as Earth Day, Public Lands Day and Water Monitoring Day. The RVC reaches over 76,000 visitors a year.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: N/A

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Hilo Harbor, Hawaii, HI

AUTHORIZATION: The project was authorized under the River and Harbor Act of 1907 and subsequent work authorized under the River and Harbor Act of 1912 and 1925.

LOCATION AND DESCRIPTION: The Hilo Deep Draft Harbor is located on the northeast coast of the island of Hawaii. The project was completed in 1930 and consists of a 10,080-foot-long breakwater protecting a 35-foot-deep basin. Hilo Harbor is one of the two main commercial ports for the Island of Hawaii.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $206,000 O: $0 T: $206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: $206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Honolulu Harbor, Oahu; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1990.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Honolulu Harbor, Oahu, Hawaii

AUTHORIZATION: The project was authorized by the River and Harbor Acts of 3 March 1905, 8 August 1917, 3 July 1930 and 3 September 1954.

LOCATION AND DESCRIPTION: Honolulu Harbor is located on the southwestern coast of the island of Oahu. The harbor consists of an entrance channel (4.000 feet long, 500 feet wide and 45 feet deep); a main harbor basin (3,300 feet long, 1,520 feet wide and 40 feet deep); a west harbor basin (3,400 feet long, 1,000 feet wide and 40 feet deep); and a connecting channel (400 feet wide and 40 feet deep); and Kalihi Channel (400 feet wide, 23 feet deep).

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $206,000 O: $0 T: $206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: NA

REC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Kahului Deep Draft Harbor, Maui; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10-years. Dredging at this project was last completed in FY1999**.**

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Kahului Deep Draft Harbor, Maui, Hawaii

AUTHORIZATION: The federal project was authorized by the River and Harbor Acts of 27 July 1916, 25 June 1919, 21 January 1927, and 14 July 1960.

LOCATION AND DESCRIPTION: Kahului Harbor is Maui's only commercial port and is located on the northern coast of the island. The Federal project consists of rubble mound breakwaters on the east and west sides of the harbor, approximately 2,766 and 2,315 feet in length, respectively; an entrance channel 600 feet wide between the breakwaters; and a harbor basin 2,050 feet wide, 2,400 feet long at 35 feet deep.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $206,000 O: $0 T: $206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; and Nawiliwili Deep Draft Harbor, Kauai. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10 years. Dredging at this project was last completed in February1999.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Nawiliwili Deep Draft Harbor, Kauai, Hawaii

AUTHORIZATION: The project was authorized under the River and Harbor Act of 2 March 1919 and September 1954.

LOCATION AND DESCRIPTION: Nawiliwili Harbor is located on the southeast coast of the island of Kauai and is the island's principal commercial harbor. The harbor consists of a breakwater 2,045 feet in length, and an S-shaped entrance channel 40 feet deep with a minimum width of 600 feet and a length of 2,400 feet.

CONFERENCE AMT. FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $206,000 O: $0 T: $206,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY2014:

N: $206,000. Funds will be used to conduct environmental coordination and collection of pre-dredge material samples and the physical/chemical/biological testing of the pre-dredge material, to determine its suitability for ocean disposal.

FRM: N/A

REC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This effort will be combined with pre-dredge activities for the Barbers Point Deep Draft Harbor, Oahu; Hilo Harbor, Hawaii; Honolulu Harbor, Oahu; and Kahului Deep Draft Harbor, Maui. Dredging of the main commercial harbors in Hawaii is conducted on a cyclical basis averaging 10 years. Dredging at this project was last completed in FY1999.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year (FY) 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

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Justification of Estimate

Investigations

Alabama

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
Mobile Harbor Channel Widening, Alabama	$ 1,423,000	$ 0	$ 0	$ 800,000	$ 0 2/	$ 600,000 1/	$ 23,000

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (NAVIGATION)

Mobile District

Mobile Harbor is located in southwest Alabama and extends from the Gulf of Mexico through Mobile Bay to the mouth of Mobile River at the City of Mobile, Alabama, a distance of approximately 39 miles. In the 1986 WRDA, several channel improvements, as well as, a turning basin and dredge disposal area were authorized for Mobile Harbor to widen the Mobile Bay Channel from the mouth of the bay to south of Mobile River to 550 ft. The sponsor, Alabama State Port Authority, has entered into a design agreement with the district to complete a Limited Re-evaluation Report (LRR) for the construction of a channel widening within the limits of the originally authorized project. Project requires separable element New Start Construction authorization for the widening. In 2008, the Port of Mobile was the ninth largest port in terms of tonnage in the United States. Its largest commodities are coal, crude, oil and petroleum which are essential to the nation's economy. The port has also seen a large increase in steel traffic because of the recently completed $4.6 billion steel facility constructed just north of Mobile and expects to see increased container ship traffic due to the Airbus Assembly Plant that is set to begin production in 2015. The widening is required to facilitate movement and improve efficiency of the port, and it is expected to be 550 feet wide by 5 nautical miles long. Larger ships currently remain at dock or off-shore while another navigates the channel. The material dredged during the construction of this project may be used for habitat restoration within Mobile Bay, the fourth largest watershed in the United States. When originally authorized, the sponsor did not have funds available to construct the entire authorized project; however, portions of the project have been constructed as funds became available to pay the required cost share. Phase I construction to a depth of 45-feet was completed in FY 94. The 1300 foot extension was considered a separable element new start, the PPA was signed in FY98 and construction was completed in FY00. The 1200-foot and 2100-foot extensions were considered as separable element new starts, the PPA was signed in FY04 and work was completed in FY08. The Turning Basin was also considered to be a separable element new start, the PPA was signed in FY09 and construction was completed in August 2010. The design agreement for the Mobile Harbor Channel Widening LRR was executed on 14 August 2012. Benefits specific to the Mobile Harbor Widening are currently being developed in the Limited Re-evaluation Report. The current construction estimate is $42M total ($31.5M Federal funds). The construction period due to environmental windows is October through March. The sponsor, Alabama State Port Authority, is aware of project cost sharing requirements, and they are prepared to fund the PED activities at a cost share of 75% Federal and 25% non-Federal.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	$1,897,000	Engineering and Design Costs	$1,897,000
Initial Federal Share	$1,423,000	Ultimate Federal Share	$1,423,000
Initial Non-Federal Share	$ 474,000	Ultimate Non-Federal Share	$ 474,000

Section 104 of the River and Harbor Act of 1954 authorized a 40-foot depth channel with a 400-foot width in Mobile Bay to the mouth of the Mobile River and a 40-foot depth in the Mobile River to the Cochran Bridge with the width varying from 400 to 775 feet. The Senate Public Works Committee on 16 July 1970 and the House Public Works Committee on 15 December 1970, under the provisions of Section 201 of the 1965 Flood Control Act, authorized a 40-foot by 400-foot channel, branching from the main ship channel and extending through a land cut to the Theodore Industrial Park. The Theodore Ship Channel was reauthorized in the Water Resources Development Act of 1976. Further improvements to the existing Federal project were initially authorized in the 1985 Energy and Water Resources Appropriation Act (PL 99-88, Ninety-ninth Congress, First Session). The improvements were reauthorized in Section 201 of the Water Resources Development Act of 1986 (PL 99 – 662, Ninety-ninth Congress, Second Session), which was approved 17 November 1986, and subsequently amended by Section 302 of the Water Resources Development Act of 1996. As previously stated, the entire Mobile Deep Draft Harbor project was authorized in WRDA 1986, Section 201, at a total cost of $451,000,000 in accordance with the Chief's Report dated November 18, 1981 with an estimated first Federal cost of $255,000,000 and an estimated first non-Federal cost of $196,000,000. The current Section 902 limit with inflation will be updated in the LRR that is ongoing. Fiscal Year 2013 funds are being utilized to complete the Limited Re-evaluation Report, including economic studies and initiate the plans and specification. Fiscal Year 2014 funds and will be used for completion of the plans and specifications n July 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Neuse River Basin, North Carolina	1,500,000	0	0	88,000 3/	0 2/	450,000 1/	962,000

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (ECOSYSTEM RESTORATION)

Wilmington District

The Neuse River basin is located in the eastern part of North Carolina and encompasses approximately 11 percent of the geographic footprint of the State of North Carolina. The basin is approximately 180 miles long, with a maximum width of about 46 miles. The Neuse River is formed by the confluence of the Eno and Flat Rivers, about 8 miles north of Durham, and has a drainage area of approximately 5,710 square miles. At the City of New Bern, the Neuse River system changes from a free-flowing river to a tidal estuary. Increased urbanization in the Raleigh-Durham area, sediment and nutrient loading from agricultural areas in the lower half of the basin, and over-harvesting of certain fisheries in the Neuse Estuary have had adverse impacts on the basin, particularly on wetlands and submerged aquatic vegetation (SAV). The feasibility study, authorized by House Resolution adopted 23 July 1997, was completed in September 2012. Ecosystem restoration features will include stabilization of up to 3,500 feet of the Gum Thicket Creek and 5,200 feet of the Cedar Creek shorelines to protect 60 acres of eroding marsh habitat and to create up to 42 acres of estuarine wetland habitat; restoration of 80 acres of oyster reef habitat in the lower Neuse River Estuary; modification of the lowhead dam on the Little River to restore connectivity to 46 miles of spawning habitat for anadromous fish; and restoration of bottomland hardwood forest at Kinston to improve wetlands function and connectivity of adjacent habitats. The fully funded total project cost is estimated to be $38,156,000 with the Federal portion $24,801,000 and the non-Federal portion $13,355,000. The design agreement is scheduled to be executed with the sponsor, the State of North Carolina, when local funds are first available. This is estimated to be August 2013. The total PED estimate has increased $800,000 from that last reported (Fiscal Year 2013) due to additional features being added to the recommended plan. PED will ultimately be cost shared at the rate for the project constructed, estimated now to be 65% Federal and 35% non-Federal, but will be financed through the PED period at 75% Federal and 25% non-Federal. Any adjustments necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$2,000,000	Total Estimated Preconstruction Engineering and Design Costs	$2,000,000
Initial Federal Share	1,500,000	Ultimate Federal Share	1,300,000
Initial Non-Federal Share	500,000	Ultimate Non-Federal Share	700,000

The project is not authorized for construction. Fiscal Year 2012 carry-in funds will be used to execute the Design Agreement in the fourth quarter of Fiscal Year 2013. Fiscal Year 2014 funds will be used to continue PED activities. The completion of PED is TBD.

Florida

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Flagler County, Florida (Completion)	1,767,000	854,000	286,000	237,000	0 2/	390,000 1/	0

Jacksonville District

Flagler County is located on the northeast coast of Florida about 60 miles south of Jacksonville, Florida and about 75 miles north of Canaveral Harbor, Florida. Matanzas Inlet and Ponce de Leon Inlet are located to the north and south of the county, respectively. The county has approximately 18 miles of Atlantic coast shoreline comprised primarily of residential structures with a few small commercial developments and a few condominiums dispersed throughout. During storms, northeasterly winds of significant magnitude extending over a large fetch on the order of 1,000 miles can produce extreme water levels and large waves that transmit considerable energy to the shoreline. Storm induced shoreline recession in the county threatens upland private and public development as well as State Road A1A, one of the area's major hurricane evacuation routes. The Flagler County shoreline was severely impacted during the passing of Hurricane Charley and subsequent events in 2004 and 2005 causing extensive beach recession. A population of 4,000 is at risk of flood inundation within the project area. The study is assessing the need for hurricane and storm damage reduction measures along the coast of Flagler County including 10.2 miles of State classified critically eroded shoreline. A restored beach would provide hurricane and storm damage protection for residential and commercial structures and assist in the protection and recovery of Federal and State listed threatened species including sea turtles. The Feasibility Cost Sharing Agreement was executed in September 2004. The local sponsor is Flagler County, Florida. Fiscal Year 2014 funds will be used to conduct an Independent External Peer Review (IEPR) and coordinate the Division Engineer's Transmittal Letter, Chief's Report, Civil Works Review Board, and State and Agency review. Indicating their support for the study, an Accelerated Funds Agreement was executed with the local sponsor in July 2012 which allowed continuation of study efforts in the absence of Fiscal Year 2013 funding.

The study was not included in the Fiscal Year 2013 President's Budget, yet the sponsor signed and received County Board approval to move forward with an Accelerated Funds Agreement dated July 2012 which will allow completion of the Alternative Formulation Briefing, Public Review, and final feasibility report. The estimated cost of the feasibility phase is $3,138,000 which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests, less the $200,000 estimated cost of the IEPR that is done at 100% Federal expense. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,236,000
Reconnaissance Phase (Federal)	98,000
Feasibility Phase (Federal)	1,669,000
Feasibility Phase (Non-Federal)	1,469,000

The study was authorized by the House Resolution 2676 adopted May 22, 2002.

The reconnaissance phase was completed in September 2004. The feasibility study is scheduled for completion in FY2014.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Georgia

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Savannah Harbor Expansion	23,479,000	11,610,000	3,194,000	3,075,000	2,800,000 2/	1,280,000 1/	1,520,000

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (NAVIGATION)

Savannah District

The Savannah Harbor area includes the lower 21.3 miles of the Savannah River, which is the principal boundary between the states of Georgia and South Carolina. The City of Savannah is located 15 miles from the river mouth. Savannah Harbor has been the fastest growing United States container port since 1995, with an average annual growth rate of over 10 percent. The Harbor's Garden City Terminal is the second largest container port on the East Cost by container volume, and the fourth largest in the nation and the largest single terminal in North America. According to the Georgia Ports Authority, over 82 percent of ships currently calling upon the Savannah Harbor are constrained in some way by the project's current depth with significantly larger deeper drafting vessel expected after the expansion of the Panama Canal by 2015. The project has an estimated cost of $656,957,000, the average annual costs are $38,900,000 and the average annual benefits are $174,200,000 at 2012 price levels for BCR of 3.8:1 at 7%. Benefits are derived from increased transportation efficiencies through reduced tidal delays as described in the General Re-evaluation Report, dated January 2012 and amended July 2012, and Chief's Report, dated 17 August 2012. The sponsor, Georgia Department of Transportation, is aware of project cost sharing requirements. Upon completion of construction, credit may be given to the local sponsor for the Federal share of the PED cost in accordance with Section 119, Public Law 109-7 (Consolidated Appropriations Resolution Fiscal Year 2003). The Georgia Ports Authority has funded initial costs of technical PED activities as needed. The final selected plan is the 47 foot alternative resulting in an aggregated cost share of approximately 70% Federal and 30% non-Federal.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Costs	$46,269,000	Engineering and Design Costs	$46,269,000
Initial Federal Share	$23,479,000	Ultimate Federal Share	$32,388,000
Initial Non-Federal Share	$22,790,000	Ultimate Non-Federal Share	$13,880,000

The Georgia Ports Authority conducted the initial Feasibility Study under the authority of Section 203 of the Water Resources Development Act of 1986 and was responsible for funding the associated study costs. The Feasibility Report was submitted to the Secretary of the Army in August 1998. The project was authorized in the Water Resources Development Act of 1999, with final approval contingent upon completion of a positive Chief's Report by the end of Calendar Year 1999. A favorable Chief's Report for the project was signed on 21 October 1999 indicating construction is contingent upon the approval of a General Reevaluation Report and Tier II Environmental Impact Statement by the Environmental Protection Agency, the Department of the Interior, the Department of Commerce and the U.S. Army Corps of Engineers. The final General Re-evaluation Report and Tier II Environmental Impact Statement documents were completed July 2012 and final Cooperating agency approvals were obtained August 2012 satisfying the conditional authorization. As previously stated, the project was conditionally authorized in WRDA 1999 at a total cost of $230,174,000. The current Section 902 limit with inflation is $473,538,000 as detailed in the final GRR dated January

2012 and amended in July 2012, and the Chief's Report dated 17 August 2012, at 1 Oct 2012 price levels. The current total project cost is $656,957,000 which exceeds the 902 limit by more than 20 percent. A change is proposed to the authorized total project cost limit. Fiscal Year 2013 funds are being used to complete Office of Management & Budget review and obtain a Record of Decision; complete the designs necessary for an efficient start of construction. The PED estimate increased $2,479,000 from the Fiscal Year 2013 Justification Statement due to the pre-construction monitoring requirements. Fiscal Year 2014 funds will be used to initiate pre-construction environmental monitoring. The completion of PED is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

$2,000 rescinded from the project in Fiscal Year 2003.
$3,000 rescinded from the project in Fiscal Year 2005.
$8,000 rescinded from the project in Fiscal Year 2006.
$6,218 rescinded from the project in Fiscal Year 2011.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

North Carolina

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Neuse River Basin, North Carolina	1,500,000	0	0	88,000 3/	0 2/	450,000 1/	962,000

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (ECOSYSTEM RESTORATION)

Wilmington District

The Neuse River basin is located in the eastern part of North Carolina and encompasses approximately 11 percent of the geographic footprint of the State of North Carolina. The basin is approximately 180 miles long, with a maximum width of about 46 miles. The Neuse River is formed by the confluence of the Eno and Flat Rivers, about 8 miles north of Durham, and has a drainage area of approximately 5,710 square miles. At the City of New Bern, the Neuse River system changes from a free-flowing river to a tidal estuary. Increased urbanization in the Raleigh-Durham area, sediment and nutrient loading from agricultural areas in the lower half of the basin, and over-harvesting of certain fisheries in the Neuse Estuary have had adverse impacts on the basin, particularly on wetlands and submerged aquatic vegetation (SAV). The feasibility study, authorized by House Resolution adopted 23 July 1997, was completed in September 2012. Ecosystem restoration features will include stabilization of up to 3,500 feet of the Gum Thicket Creek and 5,200 feet of the Cedar Creek shorelines to protect 60 acres of eroding marsh habitat and to create up to 42 acres of estuarine wetland habitat; restoration of 80 acres of oyster reef habitat in the lower Neuse River Estuary; modification of the lowhead dam on the Little River to restore connectivity to 46 miles of spawning habitat for anadromous fish; and restoration of bottomland hardwood forest at Kinston to improve wetlands function and connectivity of adjacent habitats. The fully funded total project cost is estimated to be $38,156,000 with the Federal portion $24,801,000 and the non-Federal portion $13,355,000. The design agreement is scheduled to be executed with the sponsor, the State of North Carolina, when local funds are first available. This is estimated to be August 2013. The total PED estimate has increased $800,000 from that last reported (Fiscal Year 2013) due to additional features being added to the recommended plan. PED will ultimately be cost shared at the rate for the project constructed, estimated now to be 65% Federal and 35% non-Federal, but will be financed through the PED period at 75% Federal and 25% non-Federal. Any adjustments necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$2,000,000	Total Estimated Preconstruction Engineering and Design Costs	$2,000,000
Initial Federal Share	1,500,000	Ultimate Federal Share	1,300,000
Initial Non-Federal Share	500,000	Ultimate Non-Federal Share	700,000

The project is not authorized for construction. Fiscal Year 2012 carry-in funds will be used to execute the Design Agreement in the fourth quarter of Fiscal Year 2013. Fiscal Year 2014 funds will be used to continue PED activities. The completion of PED is TBD.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $83,000. This amount will be used to perform work on the project as follows: Continue PED activities.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Of the $431,000 appropriated to PED phase in Fiscal Year 2012; $200,000 was reallocated to feasibility phase, $143,000 was reprogrammed away from the project, and $88,000 allocated to PED phase.

$0 rescinded from the project.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Surf City and North Topsail Beach, North Carolina (Completing)	1,343,000	0	597,000	296,000	225,000 2/	225,000 1/	0

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES – (FLOOD RISK MANAGEMENT)

Wilmington District

The towns of Surf City and North Topsail Beach are located in the central and northern part of Topsail Island in the southeastern part of North Carolina. Topsail Island is a barrier island located about 25 miles northeast of Wilmington, NC between New Topsail Inlet and New River Inlet. From north to south, this island includes the communities of North Topsail Beach, Surf City and Topsail Beach. As a result of Hurricane Fran in 1996 and Hurricane Floyd in 1999, the damage to publicly owned properties exceeded $5,000,000 and the total losses paid to privately owned property by the Federal Emergency Management Agency was about $32,000,000. Further, Hurricanes Bertha, also in 1996, and Fran eroded at least 25 feet of coastline leaving 66 percent of the Surf City and North Topsail Beach shoreline without its natural vegetation. This erosion, along with recent hurricanes, has either severely damaged or destroyed the primary dune system along the ocean shoreline leaving the towns vulnerable to damage from future storm events. Average damages without the proposed project are $21,100,000 per year. The study was authorized by Resolutions adopted by the House Committee on Transportation and Infrastructure dated 16 February 2000 and 11 April 2000. The Chief's Report was transmitted to Congress in April 2011. The recommended plan includes constructing a sand dune at an elevation of 15 feet above national geodetic vertical datum and a berm with a crown width of 50 feet and a top elevation of 7 feet above national geodetic vertical datum over approximately 10 miles of shoreline. The recommended project, estimated to cost $328,674,000 with an estimated Federal cost of $182,808,000 and an estimated non-Federal cost of $145,866,000, includes reducing storm damages for the shoreline extending from the town limits of Topsail Beach/Surf City to the northern end of the island. The average annual benefits for coastal storm damage reduction are $18,642,000 and total $40,779,000, including recreation benefits. The benefit-cost ratio is 2.8 to 1 based on the Chief's Report. Both sponsors, the towns of Surf City and North Topsail Beach, have expressed their support for this plan. The Design Agreement was executed in August 2011. The total PED estimate has increased by $290,000 since that last reported (Fiscal Year 2013) due to additional sediment sampling requirements. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal and 75 percent Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$1,790,000	Total Estimated Preconstruction Engineering and Design Costs	$1,790,000
Initial Federal Share	1,343,000	Ultimate Federal Share	1,164,000
Initial Non-Federal Share	447,000	Ultimate Non-Federal Share	626,000

The project is not authorized for construction. Fiscal Year 2013 funds are being used to perform supplemental sampling of the remaining borrow areas and complete 95% plans. Fiscal Year 2014 funds will be used to complete PED in FY2014. This completion date is a ten-month slip from that last reported (Fiscal Year 2013) due to delay in issuance of the beach profile contract and the additional sediment sampling requirement.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

$1,352 rescinded from the project in FY 2011.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Wilmington Harbor Improvements, North Carolina	1,640,000	189,000	103,000 3/	500,000	50,000 2/	500,000 1/	298,000

Wilmington District

The Wilmington Harbor project, a 42 to 44 foot deep draft port located at the city of Wilmington on the southeastern coast of North Carolina, requires improvements in order to address navigation inefficiencies and potential safety issues being faced by navigation vessels currently calling on the Port of Wilmington. The current alignment of the entrance channel near Bald Head Island is subject to rapid and persistent shoaling and is problematic for navigation under typical wind and tidal conditions. The Battery Island navigation channel turn is problematic for some container vessels under certain conditions of wind and tide. The current anchorage/turning basin dimensions are not adequate to properly accommodate the turning of some of the larger container vessels currently calling at the port or larger ships that may potentially call on the port in the future. Alternatives to address these existing problems are being evaluated in a cost-shared feasibility study with the State of North Carolina. This detailed evaluation includes examining multiple channel alignments and basin widths in order to address the issues defined above. Fiscal Year 2014 funds will be used to continue the feasibility study including public review of the draft report and environmental impact statement. The state of North Carolina is committed to study completion, shown by execution of the Feasibility Cost Sharing Agreement in April 2012.

Fiscal Year 2013 funds are being used to complete data collection, fully develop and analyze alternatives, and identify a tentatively selected plan. The preliminary estimated cost of the feasibility phase is $2,700,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests with the exception of $100,000 for an independent external peer review, which will be 100% federally funded. The total estimated study cost decreased by $2,490,000 since last reported (Fiscal Year 2013) due to a study re-scope in accordance with policy guidance. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,940,000
Reconnaissance Phase (Federal)	240,000
Feasibility Phase (Federal)	1,400,000
Feasibility Phase (Non-Federal)	1,300,000

This study is authorized under House Committee on Transportation and Infrastructure study resolution dated 28 June 2006.

The reconnaissance phase was completed in April 2012. The feasibility phase is scheduled for completion in TBD.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Of the $103,000 appropriated to the reconnaissance phase in FY 2011, $52,000 was reallocated to the feasibility phase.

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

South Carolina

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost	Allocations Prior to FY 2011	Allocation in FY 2011	Allocation in FY 2012	Allocation in FY 2013	Budgeted Amount in FY 2014	Additional to Complete After FY 2014
	$	$	$	$	$	$	$
Charleston Harbor, South Carolina	6,186,000	149,000	199,000	2,400,000	1,578,000 2/	1,165,000 1/	695,000

Charleston District

Charleston Harbor is located about midway along South Carolina's Atlantic coastline. Latest commercial tonnage as reported by the Waterborne Commerce Statistics Center for Fiscal Year 2011 was 17.9 million tons of cargo. The major commodity imported and exported is manufactured equipment and machinery. Per United States Department of Commerce/Bureau of the Census, the 2011 value of waterborne commerce through Charleston was $58,900,000,000. Charleston Harbor is one of 17 US strategic ports because of the presence of the Joint Base Charleston, Military Surface Deployment and Distribution Command, Defense Energy Support Center and Army Strategic Logistics Activity Charleston. Mega-ships built to carry more cargo require ports to have deeper channels to accommodate them. The existing channel depths, widths, and alignments constrain the ability of these vessels to utilize the port to their design capacity, increase transit time due to limited ability to pass except at designated locations, and/or present hazardous conditions. Proposed improvements would allow deep draft vessels to safely navigate the channel, while remaining full loaded, thus avoiding the need for lightering or steaming under partial loads. Improvements to be investigated include (1) deepening channel(s) to a variety of depths up to 50 feet Mean Lower Low Water, (2) widening channel(s), (3) adjusting existing channel alignments/bend easing, and (4) widening and/or lengthening turning basins. The Feasibility Cost Sharing Agreement was executed with the South Carolina State Ports Authority in June 2011. The funds requested for Fiscal Year 2014 will be used to continue the feasibility phase of the study. An amendment to the Feasibility Cost Sharing Agreement, allowing for accelerated funding from the sponsor, was executed on 8 September 2011. The South Carolina General Assembly passed the State Fiscal Year 2013 Budget in June 2012 and it included an increase in the Harbor Deepening Reserve Fund to $300,000,000. The State and the South Carolina State Ports Authority want to show that South Carolina is committed to moving forward with this project as quickly as possible, even if that means at some point paying for the full cost of the deepening.

Fiscal Year 2013 funds are being used for data collection and analysis, numerical modeling, and continued formulation of alternatives. The estimated cost of the feasibility phase is $11,755,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. The estimated cost of the external peer review is $250,000 and 100% federally funded. The study was re-scoped in June 2012 in accordance with policy guidance. The sponsor attended the re-scoping charette and concurred with the findings which resulted in significant cost savings. The current Federal study cost estimate of $6,186,000 is a change from the last estimate reported (Fiscal Year 2013) of $10,473,000. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$11,938,000
Reconnaissance Phase (Federal)	$183,000
Feasibility Phase (Federal)	$6,003,000
Feasibility Phase (Non-Federal)	$5,752,000

The study was authorized by Section 216 FCA 1970 (P.L. 91-611).

The reconnaissance phase was completed in June 2011. The feasibility study completion date is TBD.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

$ 0 rescinded from the study.
$ 0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Construction

Florida

APPROPRIATION TITLE: Construction - Shore Protection (Flood Risk Management)

PROJECT: Fort Pierce Beach, Florida (Continuing)

LOCATION: The Fort Pierce Beach Shore Protection Project is located on Hutchinson Island in St. Lucie County on the east coast of Florida. The project is located about 120 miles north of Miami, Florida and about 225 miles south of Jacksonville, Florida. The authorized project extends south beginning at the south jetty of the entrance to the Fort Pierce Harbor Federal navigation project for a distance of 1.3 miles to Surfside Park at its southern limit.

DESCRIPTION: The authorized project includes restoration by beach fill and periodic nourishment of 1.3 miles of ocean shore extending southward from the Fort Pierce navigation inlet, a Federal project. Under the original authority, a mean high water extension of 50 feet was recommended with a berm elevation of +10 feet mean low water chosen to tie in with the existing berm elevation. Ultimate cost sharing for the project is nonstandard due to 60 percent of the erosional impacts to the project being attributable to the Federal navigation project as well as the evaluation of shoreline ownership and public access in the length of the project. Initial Construction is cost shared at 52% Federal and 48% non-Federal. Renourishments 1 through 6 are cost shared at 47.4% Federal and 52.6% non-Federal. Renourishments 7 through 12 are to be cost shared at 77.76% Federal and 22.24% non-Federal in accordance with the December 2006 Limited Reevaluation Report (LRR) approved by South Atlantic Division on September 6, 2007 which adjusted the nourishment cycle to 2 years and incorporated downdrift impacts from the Federal navigation channel. The Federal participation period of the project is 50 years.

AUTHORIZATION: The Beach Erosion Control Study for St. Lucie County (Fort Pierce Beach), Florida was authorized by the River and Harbor Act of 1965 (P.L. 89-298 approved 27 October 1965) in accordance with the Recommendations of the Chief of Engineers in House Document No. 84, 89th Congress. The project authorization was modified by Section 102 of the 1968 River and Harbor Act (P.L. 90-483 approved 13 August 1968) to provide for construction of the project and periodic nourishment for 10 years by the Secretary of the Army. Although Federal participation was initially limited to 10 years, it was extended to 15 years by the Assistant Secretary of the Army for Civil Works in October 1978 under the authority of Section 156 of the Water Resources Development Act of 1976 (P.L. 94-587 approved 22 October 1976) . Federal participation expired in 1985. A Section 934 report was approved by the Assistant Secretary of the Army for Civil Works in June 1995, extending Federal participation to a period of 50 years beginning on the date of initiation of construction of the project. The Water Resources Development Act of 1996 (P.L. 104-303 approved 12 October 1996) authorized extension of Federal participation to a period of 50 years beginning on the date of initiation of construction of the project. The Water Resources Development Act of 1996 also authorized preparation of a General Reevaluation Report to evaluate the feasibility of extending the 1.3-mile project an additional mile south. The Water Resources Development Act of 1999 (P.L. 106-53 approved 17 August 1999) authorized the 1.0-mile extension described in the General Reevaluation Report but this was later proven to be unjustified in the 2006 LRR.

REMAINING BENEFIT-REMAINING COST RATIO: 1.0 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 5.1 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 6 5/8 percent (FY 1978)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Level 1 economic update approved in July 2012 at FY 2012 price levels based on the Fort Pierce Shore Protection Project LRR dated December 2006 using 2006 price levels. The Initial Benefit-Cost Ratios are from the Fort Pierce Shore Protection Project St. Lucie County, Florida, General Reevaluation Report with Environmental Assessment dated September 1998.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			$ 42,300,000		Initial Construction	100	Apr 1971
Initial Construction		$ 1,715,000			Periodic Nourishment	67	TBD
Periodic Nourishment		$ 40,585,000					
					Entire Project	69	TBD
Estimated Non-Federal Cost			$ 23,300,000				
Initial Construction		$ 1,813,000					
Cash Contributions	$ 1,801,000						
Other Costs	$ 12,000						
Periodic Nourishment		$ 21,487,000					
Cash Contributions	$ 21,487,000						
Other Costs	$ 0						
Total Estimated Project Cost			$65,600,000				
Initial Construction		$ 3,528,000					
Periodic Nourishment		$62,072,000					
Allocations to 30 September 2010		$16,759,000					
Allocation for FY 2011		$ 6,100,000					
Allocation for FY 2012		$ 784,000					
Conference Allowance for FY 2013		$ 126,000	5/				
Allocations through FY 2013		$ 23,769,000	1/ 2/ 3/ 6/	56.2			
Estimated Unobligated Carry-In Funds		$0	4/				
President's Budget for FY 2014		$ 5,200,000		68.5			
Programmed Balance to Complete after FY 2014		$13,331,000	7/				
Un-programmed Balance to Complete after FY 2014		$0					

1/ $2,126,000 reprogrammed to the project.
2/ $28,000 rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $370,000 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Initial construction of the project occurred in 1971 with the placement of 718,000 cubic yards (cy) of material. First renourishment of the project was completed in 1980 with placement of 346,000 cubic yards of material. A 2006 LRR modified the renourishment interval to a 2 year interval, adjusted the cost sharing to reflect the down drift impacts due to the Federal navigation project at Fort Pierce Harbor, and determined that a 1 mile extension to the project was not justified due to an accreting beach.

JUSTIFICATION: The initial construction of the project completed in 1971 with a placement of 718,000 cubic yards of material of fill placed along the 1.3-mile project shoreline at an initial cost of $628,000. No quantity of initial cubic yards of sand is included in the Chief of Engineer's Report. The renourishment cycle was adjusted from 5 years to 2 years according to the 2006 LRR. The authorized number of years of renourishment from commencement of initial construction is 50. The scheduled last year of renourishment is 2018. 8 renourishment cycles have been completed to date including 1980 (346,000 cy), 1999 (830,000 cy), 2003 (325,000 cy), 2004 (406,000 cy), 2005 (650,000 cy), 2007 (499,000 cy), 2009 (185,000 cy), and 2012 (416,000 cy). The project is extremely sensitive to storm direction and results in a varying amount of fill, but has a highly erosive area which requires frequent renourishment. The project provides protection to residential and multi-family residential upland structures, developed land, and coastal armor, for the purpose of hurricane and storm damage reduction. Any interruption in the short 2 year periodic beach renourishment cycle is felt almost immediately as drastic erosion occurs in the northern ½ mile of this project and impacts the resulting downdrift portion of the project. The last renourishment occurred late in the cycle resulting in cost escalation due to the required use of a truck haul renourishment per poor project conditions. The Current Reliability Shore Protection Condition for the project is a "Poor" rating. Project profile is below both the renourishment and the design profile. Periodic renourishment is also required to mitigate impacts due to the Federal navigation channel at Fort Pierce Inlet, Florida as recession of the shoreline is 60 percent attributable to the Federal navigation project. The average annual damages for this project are $3,950,000 based on the without project condition. The average annual damages for the with project condition are $97,000. The eyes of Hurricanes Frances and Jeanne passed over this reach of shoreline in 2004. During this flood event, the project protected upland structures from damage but sacrificed itself in the process. In October 2012, Hurricane Sandy caused wash over near the main evacuation route State Road A1A. Further erosive condition may threaten the closing down of evacuation routes. Shorefront development within the project limits is a mix of single family, multi-family, commercial, and park improvements. There is a population at risk of 4,500 people within the flood inundation area. The risk warning time is 36 hours with a risk depth of 2.0 feet. Justification for the authorized project is based on the remaining 8 years of the project economic life. The average annual benefits for the authorized project are as follows:

Annual Benefits	Amount
Storm Damage Prevention	$ 3,950,000
Total	$ 3,950,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

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Continue Post Construction Monitoring	$ 350,000
Initiate Plans and Specifications for the 9th Renourishment	280,000
Total	$ 630,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Construct the 9th Periodic Renourishment	$ 4,580,000
Engineering During Construction	$ 260,000
Construction Management	$ 360,000
Total	$ 5,200,000

NON-FEDERAL COST: In accordance with the cost-sharing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way	$ 12,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	$ 23,288,000	
Total Non-Federal Cost	$ 23,300,000	

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

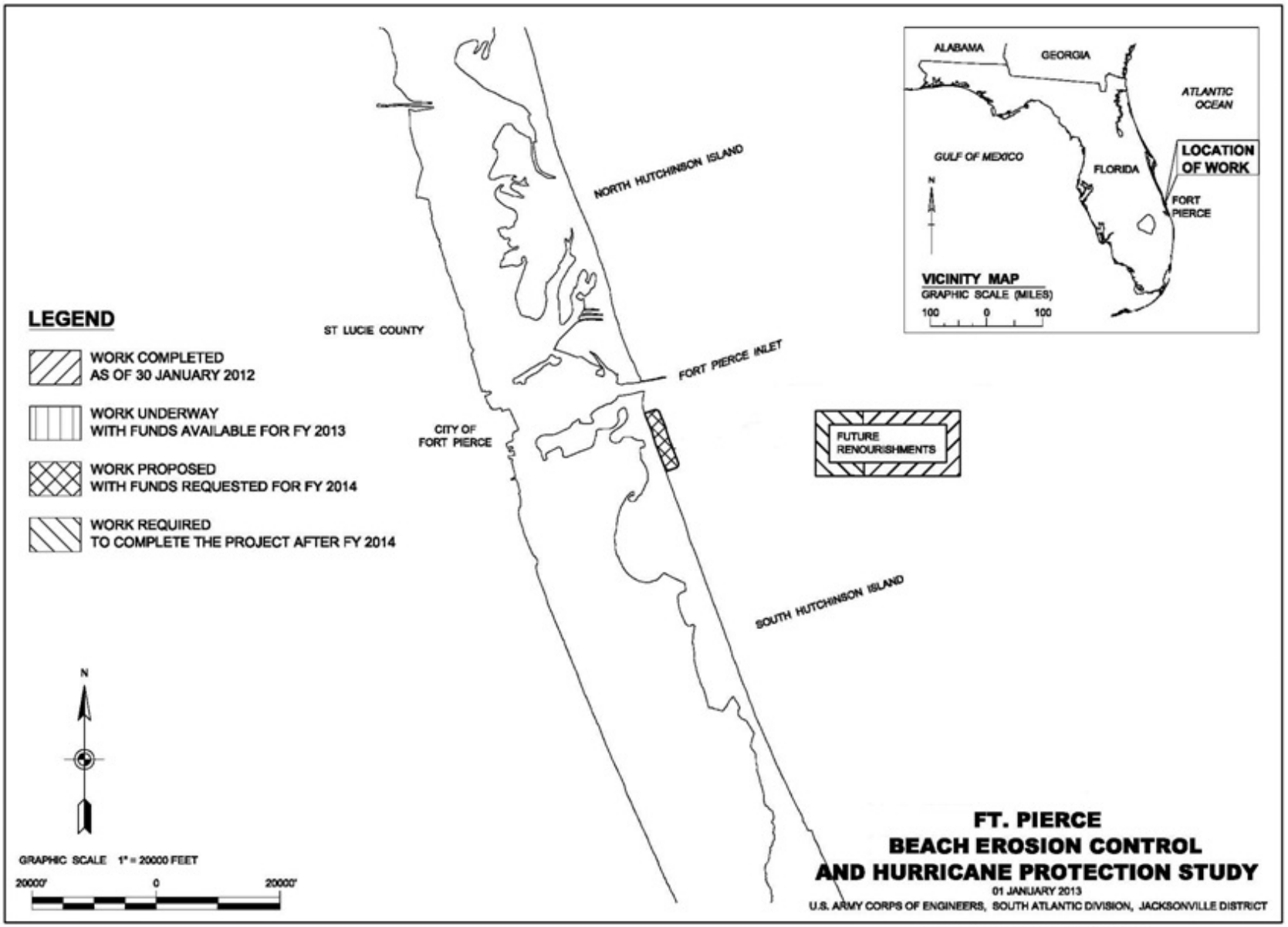
STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the St. Lucie County Board of Commissioners. A Project Cooperation Agreement was executed 3 September 1998 to extend Federal participation to the year 2020 for the 1.3-mile authorized project. An amendment to the PCA was executed on 17 August 2008 to reflect the cost share changes for periodic renourishments 7 through 12 based on mitigation of down drift impacts due to the Federal channel at Fort Pierce Inlet as identified in the Dec 2006 Fort Pierce Shore Protection Project LRR, approved September 2007. The non-Federal share is derived from a combination of general county revenue and state sponsored funds. The non-Federal sponsor is willing and able to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $42,300,000 is an increase of $5,100,000 from the latest estimate ($37,200,000) presented to Congress (FY 2013). This increase includes the following:

Item	Amount
Price Escalation on Construction Features	$ 5,745,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustements)	$ (645,000)
Total	$ 5,100,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Final Environmental Assessment was prepared in 1998 and an Environmental Impact Statement was completed in 2002.

OTHER INFORMATION: Funds to reimburse the sponsor for preconstruction engineering and design and construction of the initial fill were first appropriated in FY 1972 under the construction appropriation. Initial fill was completed in FY 1971 by the non-Federal sponsor. Fish and Wildlife Mitigation costs including dune re-vegetation, exotic plant removal, and artificial reef totaled $2,857,000. All fish and wildlife mitigation construction activities are complete. 43 of 50 years of beach nourishment have been completed. A detailed review of project authorization was conducted in May 2012. As of the date of this J-sheet, the revision in FY 2013 activities reflects a change to the scope of monitoring work which was last reported erroneously to include a physical monitoring requirement and report preparation attributed to navigation impacts.



PROJECT STATUS MAP (RCS CECW-B-13)

APPROPRIATION TITLE: Construction – (Flood Risk Management – Dam Safety Action Classification (DSAC) I Replacement)

PROJECT: Herbert Hoover Dike, Florida (Continuing)

LOCATION: The Herbert Hoover Dike (HHD) is located in Lake Okeechobee, Florida. The HHD system encircles Lake Okeechobee entirely, except in the vicinity of Fisheating Creek on the western shore. The existing embankments total about 143 miles in length with typical crest elevations rising about 25 feet above adjacent land elevations.

DESCRIPTION: The Major Rehabilitation Report (MRR), approved in November 2000, divided the dike into 8 Reaches and included a detailed analysis of alternatives in Reach 1. The MRR proposed construction of a seepage/drainage berm along the landside toe of the dike for Reach 1. Following input from a variety of expert sources, the U.S. Army Corps of Engineers (Corps) convened an independent technical review panel to further evaluate the design of the proposed repairs, which were underway. After reviewing the findings of this panel, the Corps decided to fundamentally alter its plans for strengthening the HHD. The new design concept includes toe-ditch fill, cut-off wall at the center of the dike, and seepage berm. The former Reach by Reach approach has now been replaced with a system wide risk reduction approach as required for safety modifications to dams. Implementation will utilize this risk reduction strategy by addressing the culvert structures as the first order of work while completing cutoff wall installation to address seepage and piping in Reach 1 between the cities of Port Mayaca and Belle Glade, Florida.

AUTHORIZATION: HHD is a component of the Central and Southern Florida (C&SF) Project for Flood Control and Other Purposes. The C&SF Project was authorized in the Rivers and Harbors Act of 1930, the Flood Control Acts of 1948, 1954, 1958, 1960, 1965 and 1968; 1970, Section 103 and, the Water Resources Development Acts of 1986, 1988, 1990, 1992, 1996, 2007.

REMAINING BENEFIT - REMAINING COST RATIO for the project as a whole: N/A; DSAC, Level 1 Life Safety Risk

TOTAL BENEFIT - COST RATIO for the project as a whole: N/A; DSAC, Level 1 Life Safety Risk

INITIAL BENEFIT - COST RATIO – N/A; DSAC, Level 1 Life Safety Risk

BASIS OF BENEFIT - COST RATIO: The latest economic analysis performed is in the November 2000 MRR, which estimated that the benefit-cost ratio for the project as a whole would be 0.94 to 1 at a 6 1/8 percent discount rate, using October 2000 price levels. This is the equivalent of a benefit-cost ratio of 0.96 to 1 at a 7 percent discount rate. Since that time, in response to the views of external peer reviewers and the findings of the independent technical review panel, the Corps made revisions to the project plan. The resulting plan would cost roughly three times as much as the plan proposed in the 2000 report.

These benefit-cost ratios do not, however, reflect the benefits of reduced risk of loss of life, which cannot be quantified in economic terms. The Corps has classified the HHD as a DSAC Level 1. Structures in this class are critically near failure or extremely high risk under normal operations without intervention. In this case, there is a concern even at a relatively low pool level due to the limitations of current outlet structures. As an interim measure, the Corps has changed the operating regime for Lake Okeechobee to lower the probability of failure from seepage. However, it is also proceeding to repair the dike as quickly as is practical in order to further mitigate the risk.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$2,044,666,000			Levees	35	TBD
Estimated Non-Federal Cost		$32,586,000			Culverts	14	TBD
Cash Contributions	$0				Remaining Levees	0	TBD
Other Costs	$32,586,000						
					Entire Project	21	TBD
Total Estimated Project Cost		$2,077,252,000					
Allocation to 30 September FY 2010		$320,359,000	8/				
Allocations for FY 2011		$107,583,000					
Allocations for FY 2012		$85,000,000					
Conference Allowance for FY 2013		$130,000,000	5/				
Allocations through FY 2013		$642,942,000	1/ 2/ 3/ 6/	31.0			
Estimated Unobligated Carry-In Funds		$0	4/				
President's Budget Amount for FY 2014		$86,000,000		35.7			
Programmed Balance to Complete after FY 2014		$1,315,724,000	7/				
Un-programmed Balance to Complete after FY 2014		$0					

1/ $(12,284,000) reprogrammed from the project.
2/ $(7,034,000) rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-In Funding: As of the date this justification was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A.
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $0 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.
8/ In accordance with Section 4035 of the Water Resources Development Act of 2007, appropriations were received in FY 2008 and FY 2010 for the supplemental report to the 2000 MRR. The Allocations to 30 September FY 2010 has been corrected to include these funds.

PHYSICAL DATA: The HHD system consists of implementation of risk reduction features throughout approximately 143 miles of levee surrounding Lake Okeechobee, with the replacement of 28 culverts and removal or abandonment of 4 culverts.

JUSTIFICATION: The work on HHD involves the construction of a cutoff wall between Port Mayaca and Belle Glade. Landside construction includes features such as partial seepage berms, relief trenches and structural solutions for removing or replacing existing culverts and other penetrations through the embankment. Chance of breach or failure is dependent on lake elevation and other factors such as hurricanes that could affect a population of 40,000 at risk with a risk-warning time of 1 hour and a LSHI of 1433.3. Currently, the probability of catastrophic dike failure due to piping is unacceptably high. Such an event would produce flooding, which could (depending on its location) lead to the loss of life and/or significant economic damage. The Corps is proceeding first with work in the areas of the dike where the potential risk is the greatest. Any such failure would also adversely affect the ecosystem of Lake Okeechobee (directly) and the estuaries of the Indian River Lagoon and the Caloosahatchee River (indirectly). It would also reduce the ability to store water in the lake for release in dry years for consumptive uses and to benefit the ecosystem of the Everglades.

FISCAL YEAR 2013: The Total unobligated dollars are being applied as follows:

Continue Construction of Culverts	$124,712,000
Continue Engineering During Construction	$2,905,000
Continue Design/Field Investigation	$9,299,000
Continue HHD Dam Safety Modification Study	$7,003,000
Continue Construction Management	$9,081,000
Total	$153,000,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue Construction of Culverts	$64,919,000
Continue Engineering During Construction	$3,509,000
Continue Design/Field Investigation	$6,234,000
Continue HHD Dam Safety Modification Study	$3,500,000
Continue Construction Management	$7,838,000
Total	$86,000,000

NON-FEDERAL COST: There is no cost share requirement for the current project as authorized for construction. Non-Federal cost listed in the previous financial summary table are in accordance with the cost sharing and financing concepts reflected in the original, 1930's-era legislation.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way	$0	$0
Total Non-Federal Costs	$0	$0

STATUS OF LOCAL COOPERATION: A Partnership Agreement (PA) was not required for the Herbert Hoover Dike Project. There are resolutions through which the sponsor, South Florida Water Management District (SFWMD), commits to items of local cooperation. This consists of Resolutions 12 (1948) and 398 (1949). The repairs to the Herbert Hoover Dike are being 100% federally funded. Any additional real estate or easements required for the repairs are the responsibility of the local sponsor.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $2,044,666,000 is an increase of $3,490,000 from the latest estimate ($2,041,176,000) presented to Congress (FY 2013). The change includes the following items:

Item	Amount
Price Escalation on Construction Features	$3,490,000
Total	$3,490,000

The FY 2009 Federal cost estimate was based on the rough cost estimate developed for the 2000 Major Rehabilitation Report (MRR), escalated yearly. Since the 2000 MRR, additional detailed information has been compiled and developed regarding the cut-off wall and the landside rehabilitation features. In 2008 and 2009 the project schedule, activities and cost were reviewed and overhauled based on award of the 11 miles of cut-off all, utilizing four contractors. The actual cost of construction was used as a basis to update the remaining costs associated with the project.

The land side rehabilitation features of relief wells, relief trenches and seepage berm have also been developed and refined since the 2000 MRR and reviewed by the agency technical review team. In March/April 2009 rough costs were developed both by Corps in-house and by Architectural-Engineer firms for Reach 1 for the geotechnical solutions for these land side rehabilitation features. These estimates were reviewed by the Agency Technical Review team and were extrapolated through the balance of Reaches 1, 2 and 3. In February 2010 a cost risk analysis was completed by the Walla Walla District Corps of Engineers Cost Engineering

COMPARISON OF FEDERAL COST ESTIMATES (Continued)

Center of expertise on initial cut-off wall and land side rehabilitation for Reaches 2 and 3. Because of the cost increases in the redesign recommended by the independent technical review panel alternative designs are also being evaluated to assess cost and feasibility.

The cost estimates used for culvert replacements and removals were based on concept designs. These estimates will be revised as designs are refined and actual construction costs are realized.

The project schedule is based on maximum capability for reduction of risk for the entire system. The project is scheduled with the last construction contract being awarded in FY 2021. The subsequent project estimate increased due to substantial cost information based on actual construction and more definitive land side rehabilitation cost estimates. The rehabilitation will be analyzed for risk and risk reduction and there may come a point in time where the risk is decreased to a point that rehabilitation features will either no longer be needed or reduced below the costs of rehabilitation.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT (EIS) COMPLIANCE: A Supplemental EIS was prepared in January 2005 and the Record of Decision was signed in September 2005.

The preparation of a required Environmental Assessment (EA) for the removal and replacement of the federal culverts within the HHD system was completed in May 2011.

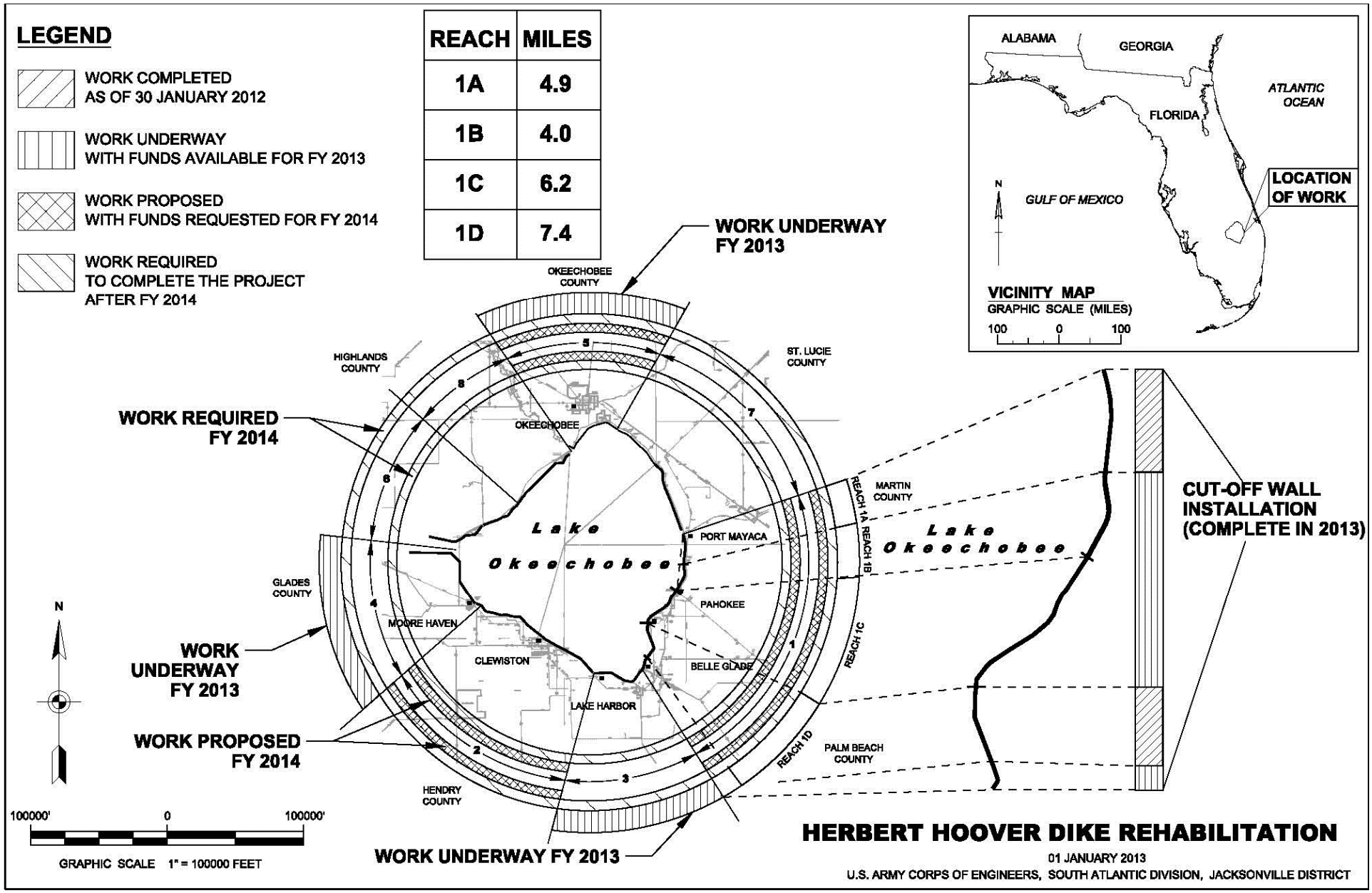
The preparation of a required Environmental Assessment (EA) for the seepage collection/filtering system pilot test was completed in December 2011.

OTHER INFORMATION: Funding for the major rehabilitation was first appropriated in FY 2001. All funding prior to FY 2001 was appropriated through dam safety.

A value engineering (VE) study was done on design for Reach 1 described in the 2000 MRR. The VE recommendation was a modified plan of the recommended plan in the MRR. Subsequently, a Detailed Design Report (DDR) analyzed the VE plan and determined that it permitted too much seepage flow through the section and impacted local flood control. Following input from a variety of expert sources, the Corps convened an independent technical review panel to further evaluate the design of the proposed repairs, which were underway. After reviewing the findings of this panel, the Corps fundamentally altered its design for strengthening the HHD. Preliminary analyses indicated that construction of a cut-off wall in conjunction with landside repairs would be required within a 27-mile stretch in the southwestern portion of the dike, which when complete would increase reliability of the portion of the dike at greatest risk of failure to authorized levels of protection. The most recent approved MCASES cost estimate is contained in the 2000 MRR. A HHD Dam Safety Modification Report is being prepared for the entire HHD system, which will also evaluate the feasibility of alternative designs for their feasibility and potential to reduce the project cost.

The HHD Project is a multi-purpose project authorized for flood control, water supply, and navigation. The Comprehensive Everglades Restoration Plan (CERP) assumed the dike was fully functional. A fully functional dike will support the authorized ecosystem restoration benefits of the CERP. The current effort to strengthen the dike, when completed, will allow the Corps to hold more water safely in the lake. This will enable the Corps to release excess water to the estuaries of the Indian River Lagoon and the Caloosahatchee River in a more controlled, less damaging, fashion. In the long-term, it will also enable the Corps to release more water during dry periods to benefit the ecosystem of the Everglades.

As of the date of this J-sheet, the FY 2013 distribution of funds reflects the current schedule and a $23,000,000 carry-in due to contract awards in FY 2012 that were less than anticipated.


LEGEND
WORK COMPLETED AS OF 30 JANUARY 2012
WORK UNDERWAY WITH FUNDS AVAILABLE FOR FY 2013
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014
REACH | MILES
1A | 4.9
1B | 4.0
1C | 6.2
1D | 7.4
ALABAMA
GEORGIA
ATLANTIC OCEAN
FLORIDA
GULF OF MEXICO
LOCATION OF WORK
VICINITY MAP
GRAPHIC SCALE (MILES)
100 0 100
WORK UNDERWAY FY 2013
WORK REQUIRED FY 2014
WORK UNDERWAY FY 2013
WORK PROPOSED FY 2014
WORK UNDERWAY FY 2013
OKEECHOBEE COUNTY
HIGHLANDS COUNTY
ST. LUCIE COUNTY
MARTIN COUNTY
GLADES COUNTY
HENDRY COUNTY
PALM BEACH COUNTY
OKEECHOBEE
PORT MAYACA
PAHOKEE
MOORE HAVEN
CLEWISTON
BELLE GLADE
LAKE HARBOR
Lake Okeechobee
REACH 1A
REACH 1B
REACH 1C
REACH 1D
1
2
3
4
5
6
7
8
N
100000' 0 100000'
GRAPHIC SCALE 1" = 100000 FEET
CUT-OFF WALL INSTALLATION (COMPLETE IN 2013)
HERBERT HOOVER DIKE REHABILITATION
01 JANUARY 2013
U.S. ARMY CORPS OF ENGINEERS, SOUTH ATLANTIC DIVISION, JACKSONVILLE DISTRICT

APPROPRIATION TITLE: Construction – Shore Protection (Flood Risk Management)

PROJECT: Nassau County, Florida (Continuing)

LOCATION: The Nassau County Shore Protection Project is located along the Northeastern coast of Florida in Nassau County adjacent to the Florida/Georgia border and 20 miles north of Jacksonville Harbor. The project area begins approximately 0.7 miles south of the south jetty of St. Mary's Entrance Channel and proceeds 3.6 miles to the south terminating near Sadler Road in Fernandina Beach, Florida.

DESCRIPTION: The recommended shore protection plan is comprised of initial fill and beach renourishment for hurricane and storm damage reduction of 3.6 miles of Nassau County shoreline located between Florida Department of Environmental Protection (FDEP) monuments R-13 through R-33. The design template berm elevation is +13.0 feet mean low water and would result in a pre-project mean high water extension of 40 feet. The design slopes reflect the natural existing conditions of 1 vertical (V) on 15 horizontal (H) to mean low water and 1V on 25H to existing ground. The primary borrow source consists of the South Channel Borrow area, immediately south of the St. Mary's Entrance Channel, located approximately 2 miles from the center of the project area. Ultimate cost sharing for the project is nonstandard due to 50 percent of erosion to the project being attributable to the Federal navigation project at Fernandina Harbor as well as the evaluation of shoreline ownership and public access in the length of the project. The Nassau County shore protection project is cost shared at 79.1% Federal and 20.9% non-Federal.

AUTHORIZATION: Section 3(a) (3) of Water Resources Development Act of 1988 (P.L. 100-676, approved 17 November 1988) authorized the project for construction.

REMAINING BENEFIT-REMAINING COST RATIO: 4.0 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 3.6 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 3.9 to 1 at 5 7/8 percent (FY 2006)

BASIS OF BENEFIT-COST RATIO: Benefit-cost ratios are based upon the Nassau County Level 1 Reaffirmation Report approved in July 2011 at FY 2011 price levels. The basis of the Level 1 economic update is the 2006 Nassau County, Florida, Shore Protection Project, General Reevaluation Report (GRR) dated April 2006 at October 2005 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			$163,600,000		Initial Construction	100	Jun 2008
Initial Construction		$ 15,250,000			Periodic Nourishment	0	TBD
Periodic Nourishment		$148,350,000					
					Entire Project	10	TBD
Estimated Non-Federal Cost			$ 43,600,000				
Initial Construction		$ 4,430,000					
Cash Contributions	$ 4,030,000						
Other Costs	$ 400,000						
Periodic Nourishment		$ 39,170,000					
Cash Contributions	$ 39,170,000						
Other Costs	$ 0						
Total Estimated Project Cost			$207,200,000				
Initial Construction		$ 19,680,000					
Periodic Nourishment		$187,520,000					
Allocations to 30 September 2010		$ 16,471,000					
Allocation for FY 2011		$ 300,000					
Allocation for FY 2012		$ 686,000					
Conference Allowance for FY 2013		$ 0	5/				
Allocations through FY 2013		$ 17,457,000	1/ 2/ 3/ 6/	10.7			
Estimated Unobligated Carry-In Funds		$ 320,000	4/				
President's Budget for FY 2014		$ 9,000,000		16.2			
Programmed Balance to Complete after FY 2014		$137,143,000	7/				
Un-programmed Balance to Complete after FY 2014		$ 0					

1/ $308,000 reprogrammed to the project.
2/ $30,000 rescinded from the project
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $320(x1000). This amount will be used to perform work on the project as follows: Construction management activities for the 1st periodic renourishment.
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $1,856,000 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Initial nourishment completed in June 2008 consisted of 2,535,000 cubic yards (cy)of placement. The project consists of 9 periodic renourishments with scheduled placement of 1,472,000 cubic yards every 5 years.

JUSTIFICATION: Initial construction was completed in June 2008 and consisted of 2,535,000 cubic yards of placement. The Chief's Report does not contain a value for quantity of fill. The renourishment cycle is every 5 years at 1,472,000 cy per cycle. The project is authorized for 50 years of renourishment from commencement of initial construction and the scheduled last year of renourishment. The last scheduled renourishment is in 2045. 0 cycles have been completed to date. The first periodic renourishment is required in Nassau County to provide hurricane and storm damage protection for residential and commercial structures. The project assists in the protection and recovery of Federal or state listed threatened or endangered species including a high density area of sea turtle nesting. Beach nourishment is also required to mitigate impacts due to the Federal navigation project at Fernandina Harbor. Section 314 of Public Law 106-53 based off of the April 1999 (Revised April 2006) General Reevaluation Report determined 50 percent of recession of the shoreline of the project area is a result of dredging impacts from the Federal navigation project at Fernandina Harbor. The project has not been renourished since initial construction and a FY 2014 renourishment would allow the project to only be 1 year behind authorized renourishment cycle. There is a population at risk within the project inundation area of 1,500. The risk warning time is 36 hours with a risk depth of 0.5 feet. Average annual damages for the without project condition are $10,417,000. Average annual damages for the "with" project condition are $333,000. The average annual benefits are as follows:

Annual Benefits	Amount
Storm Damage Prevention	$ 10,084,000
Total	$ 10,084,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Water Quality Certificate	$ 100,000
Plans and specifications for 1st periodic renourishment	$ 700,000
Total	$ 800,000

Funds in the amount of $320,000 are scheduled to be carried over unobligated into FY 2014.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Construction of the 1st Periodic Renourishment	$ 7,800,000
Engineering During Construction	$ 836,000
Construction Management	$ 684,000
Total	$ 9,320,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursement	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way	$ 400,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	$ 43,200,000	
Total Non-Federal Cost	$ 43,600,000	

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

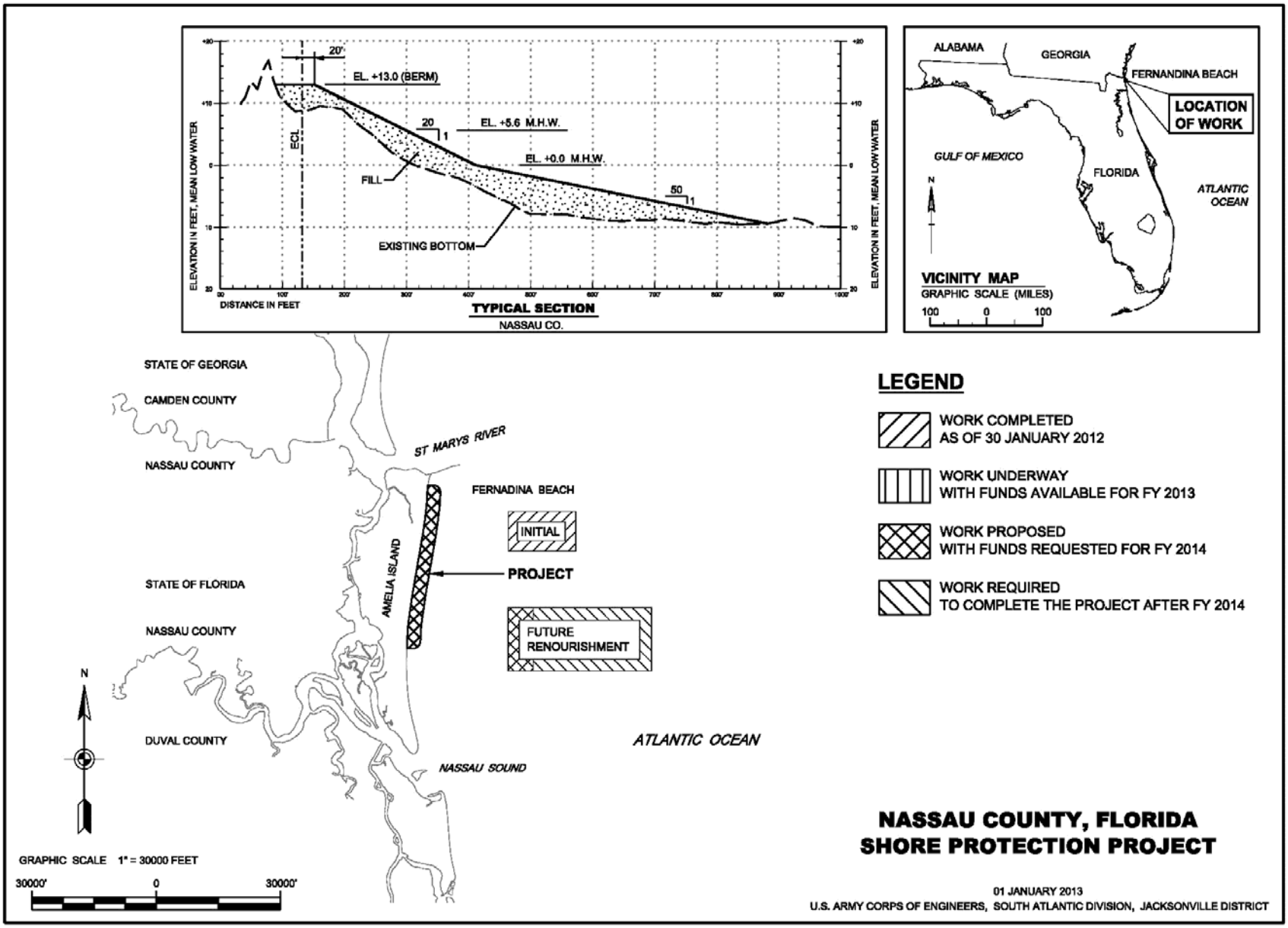
STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the City of Fernandina. A Project Cooperation Agreement was executed 28 September 2007. The non-Federal share is derived from a combination of city and county developed general revenue and state sponsored funds. The sponsor is willing and able to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $163,600,000 is an increase of $7,300,000 from the latest estimate ($156,300,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Schedule Changes	$ 6,200,000
Price Escalation on Construction Features (including Contingency adjustments)	$ 1,100,000
Total	$ 7,300,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment and a Finding of No Significant Impact (dated December 2005) were prepared and included in the Nassau County, Florida, Shore Protection Project, April 2006 General Reevaluation Report dated April 1, 2006.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were first appropriated in FY 1992 and funds to initiate construction were first appropriated in FY 2003. Section 314 of Water Resources Development Act of 1999 (P.L. 106-53, approved 17 August 1999) provided an increase to the total authorized maximum project cost. 5 of 50 years of beach nourishment have been completed. A detailed review of project authorization was conducted in May 2012. As of the date of this J-sheet, the revision in FY 2013 activities reflects a change to the scope of monitoring work which was last reported erroneously to include a physical monitoring requirement and report preparation attributed to navigation impacts.



PROJECT STATUS MAP (RCS CECW-B-13)

APPROPRIATION TITLE: Construction – (Flood Risk Management)

PROJECT: Pinellas County, Florida (Continuing)

LOCATION: The project is located along the west-central Gulf coast of Florida, adjacent to Tampa and St. Petersburg, approximately 100 miles southwest of Orlando, covering about 25 miles of the island beaches in the Clearwater-St. Petersburg area of Pinellas County, extending from Dunedin Pass to Pass-A-Grille.

DESCRIPTION: The project provides for initial fill and periodic beach renourishment at four separable elements: restoration of 5,000 feet of beach at Clearwater Beach Island; 41,700 feet of beach at Sand Key (including Indian Rocks Beach and Redington Beach); 10,700 feet of beach at Treasure Island; and, 2,800 feet of beach on Long Key. The project also includes advance nourishment of each segment, construction of 600 feet of revetment at Long Key and breakwaters at locations along Sand Key, along with periodic nourishment of each segment as needed. Unprogrammed work is the Clearwater Beach segment, pending a decision to construct these features. Cost sharing is nonstandard due to evaluation of shoreline ownership and public access in the length of the project. The Clearwater Beach element is cost shared at 61.4% Federal and 38.6% non-Federal. The Sand Key element is cost shared at 50% Federal and 50% non-Federal for initial construction; 62.8% Federal and 37.2% non-Federal for periodic renourishment. The Treasure Island element is cost shared at 50% Federal and 50% non-Federal for initial construction; 57.8% Federal and 42.2% non-Federal for periodic renourishment. The Long Key element is cost shared at 50% Federal and 50% non-Federal for initial construction; 60.8% Federal and 39.2% non-Federal for periodic renourishment.

AUTHORIZATION: Project authorized for construction by Section 101 of the Rivers and Harbors Act of 1966 (P.L. 89-789 approved 7 November 1966).

REMAINING BENEFIT-REMAINING COST RATIO: 3.2 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 8.2 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 9.4 to 1 at 3 1/4 percent (FY 1968)

BASIS OF BENEFIT-COST RATIO: Benefit-cost ratios are based upon the latest Level 1 economic update evaluation approved in July 2012 at 2012 price levels. The basis of the Level 1 economic update is the approved Limited Reevaluation Report and Environmental Summary for Pinellas County, Florida, Beach Erosion Control Project dated April 1994 (revised August 1994) at October 1993 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST
Estimated Federal Cost			$185,500,000	
Programmed Construction		$163,700,000		
Initial Construction	$21,019,000			
Periodic Nourishment	$142,681,000			
Unprogrammed Construction		$21,800,000		
Initial Construction	$2,880,000			
Periodic Nourishment	$18,920,000			
Estimated Non-Federal Cost			$123,500,000	
Programmed Construction		$109,800,000		
Initial Construction	$21,280,000			
Cash Contributions	$21,203,000			
Other Costs	$ 77,000			
Periodic Nourishment	$88,520,000			
Cash Contributions	$88,367,000			
Other Costs	$153,000			
Unprogrammed Construction		$13,700,000		
Initial Construction	$1,810,000			
Cash Contributions	$1,803,000			
Other Costs	$ 7,000			
Periodic Nourishment	$11,890,000			
Cash Contributions	$11,828,000			
Other Costs	$62,000			
Total Estimated Programmed Construction Cost			$273,500,000	
Initial Construction		$42,299,000		
Periodic Nourishment		$231,201,000		

STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Groins:	100	Dec 1987
Treasure Island	100	Sep 1976
Treasure Island Groin	100	Sep 1976
No. 2 Extension	100	Jun 1983
Pass-A-Grille	100	Jun 1984
Rehabilitation of N.Groin at St. John's Pass	100	Dec 1987
Breakwaters:	100	Sep 1986
Long Key	100	Sep 1986
Sand Key Breakwater	100	Mar 1986
Initial Construction	75	TBD
Treasure Island	100	Jul 1969
Long Key	100	Apr 1980
Sand Key	100	Sep 1993
Clearwater	0	TBD
Periodic Nourishment	47	TBD
Treasure Island	90	TBD
Long Key	60	TBD
Sand Key	37	TBD
Clearwater	0	TBD
Entire Project	50	TBD

SUMMARIZED FINANCIAL DATA(continued)			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Total Estimated Unprogrammed Construction Cost		$35,500,000				
Initial Construction	$4,690,000					
Periodic Nourishment	$30,810,000					
Total Estimated Project Cost		$309,000,000				
Initial Construction	$46,989,000					
Periodic Nourishment	$262,011,000					
Allocations to 30 September 2010	$96,883,000					
Allocation for FY 2011	$11,593,000					
Allocation for FY 2012	$0					
Conference Allowance for FY 2013	$0	5/				
Allocations through FY 2013	$108,476,000	1/ 2/ 3/ 6/	66.3			
Estimated Unobligated Carry-In Funds	$ 0	4/				
President's Budget for FY 2014	$ 7,700,000		71.1			
Programmed Balance to Complete after FY 2014	$47,524,000	7/				
Unprogrammed Balance to Complete after FY 2014	$21,800,000					

1/ $723,000 reprogrammed to (from) the project.
2/ $145,000 rescinded from the project.
3/ $283,000 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $25,000 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA:

	Initial Beach Fill Cubic Yards (cy)		Periodic Nourishment	
Sand Key	2,173,000	cy	365,200	cy every 5 years
Treasure Island	599,000	cy	275,000	cy every 5 years
Long Key	67,000	cy	275,000	cy every 5 years
Clearwater Beach Island	130,000	cy	55,000	cy every 5 years

JUSTIFICATION: Initial construction was completed for; Treasure Island in 1969 with an initial fill of 599,000 cy, Long Key in 1980 with an initial fill of 67,000 cy and Sand Key in 1993 with an initial fill of 2,173,000 cy; Clearwater has not been constructed. The renourishment cycle is 5 years for all 4 segments. The Treasure Island segment is authorized for 50 years of renourishment from the commencement of initial construction. The scheduled last year of renourishment is 2014. 9 cycles have been completed to date for Treasure Island. The cy placed in each cycle are as follows: 1971 (75,000 cy), 1972 (155,000 cy), 1976 (380,000 cy), 1980 (169,000 cy), 1983 (270,000 cy), 1996 (107,000 cy), 2000 (389,000 cy), 2004 (225,000 cy), and 2010 (275,000 cy). (The project protects against damage to highly developed commercial and multi-residential upland properties as a result of storm damage. The current profile of the Treasure Island beach segment is below the design berm profile giving a current profile rating of "Poor" according to the Shore Protection Reliability Index. Latest inspection performed after the Tropical Storm Debbie event in June 2012 revealed significant scarping and up to 30 feet of eroded dune as a result of the storm. The county has requested Emergency Funds from effects of Tropical Storm Debbie for all segments in accordance with Presidential Declaration of affected counties. Delay in construction would leave upland structures further exposed to effects from tropical storms/hurricanes. Nourishment completed to date along the Treasure Island segment has been highly successful providing storm damage protection benefits. Assessing the after effects of the renourishment of the Sand Key segment through Florida Department of Environmental Protection required monitoring is critical to determining if the project is performing better than expected and at least meeting the design profile. The Treasure Island segment has a population at risk within the project inundation area of 7,000. The risk warning time is 36 hours with a risk depth of 4.2 feet. The Sand Key segment has a population at risk within the project inundation area of 13,000. The risk warning time is 36 hours with a risk depth of 4.2 feet. Average annual damages for the without project condition are: $32,194,000 for Sand Key; $9,924,000 for Treasure Island; $632,000 for Long Key; and $557,000 for the Clearwater Beach segment. Average annual damages for the "with" project condition are: $13,225,000 for Sand Key; $0 for Treasure Island; $293,000 for Long Key; and $122,000 for the Clearwater Beach segment. The average annual benefits for each project segment are as follows:

Annual Benefits	Amount
Storm Damage Prevention	
Sand Key	$ 18,969,000
Treasure Island	$ 9,924,000
Long Key	$ 339,000
Clearwater Beach	$ 679,000
Total	$ 29,911,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Construction Management on the Sand Key segment	$ 299,000
Water Quality Certificate for Treasure Island	$ 100,000
Environmental Assessment for Treasure Island	$ 90,000
Total	$ 489,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate and Complete the 10th and Final Periodic Renourishment of Treasure Island segment	$6,440,000
Engineering During Construction	$640,000
Construction Management	$420,000
Post Construction Monitoring of the Sand Key segment	$200,000
Total	$7,700,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursement	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Sand Key separable element		
Provide lands, easements, and rights-of-way	$ 95,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	$ 81,405,000	
Treasure Island separable element		
Provide lands, easements, and rights-of-way	$ 34,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	$ 10,566,000	
Long Key separable element		
Provide lands, easements, and rights-of-way	$ 101,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	$ 17,599,000	
Clearwater Beach separable element – Unprogrammed element		
Provide lands, easements, and rights-of-way	$ 69,000	
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.	$ 13,631,000	
Total Non-Federal Costs	$123,500,000	

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the Pinellas County Board of County Commissioners. A Project Cooperation Agreement (PCA) was executed 7 April 1995 for the Treasure Island, Long Key and Sand Key segments. The PCA is supported by the approved Limited Reevaluation Report and Environmental Summary for Pinellas County, Florida, Beach Erosion Control Project dated April 1994 (revised August 1994). The non-Federal sponsor is willing to continue contributions. The non-Federal share is derived from a combination of county developed general revenue and state sponsored funds.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $185,500,000 is an increase of $6,700,000 from the latest estimate ($178,800,000) presented to Congress (FY 2010). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$5,700,000
Schedule Changes	$1,000,000
Total	$6,700,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The initial Environmental Impact Statement for Sand Key, Pinellas County project, and Section 404(b)(1) Evaluation was filed with the Environmental Protection Agency on 8 November 1985. The final Environmental Assessment and Finding of No Significant Impact was completed for Sand Key on 9 June 2003. The Final Environmental Assessment and Finding of No Significant Impact was completed for the Treasure Island and Long Key segments on 14 December 2009.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1968 under the construction appropriation. Funds to initiate construction were appropriated in FY 1969 under the construction appropriation. Section 501 of the Water Resources Development Act of 1986 (P.L. 99-662 approved 17 November 1986) provided an increase in law to the total authorized maximum project cost. 33 of 50 years of beach nourishment have been completed for the Long Key separable element. 44 of 50 years of beach nourishment have been completed for the Treasure Island separable element. 20 of 50 years have been completed for the Sand Key separable element.

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENT

Sand Key			
Estimated Federal Cost			$123,900,000
Initial Construction		$19,292,000	
Periodic Nourishment		$104,608,000	
Estimated Non-Federal Cost			$81,500,000
Initial Construction		$19,564,000	
Cash Contributions	$19,558,000		
Other Costs	$ 6,000		
Periodic Nourishment		$61,936,000	
Cash Contributions	$61,847,000		
Other Costs	$ 89,000		
Total Estimated Project Cost			$205,400,000
Initial Construction		$38,856,000	
Periodic Nourishment		$166,544,000	

REMAINING BENEFIT-REMAINING COST RATIO: 5.7 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 8.6 to 1.0 at 7 percent

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENT

Treasure Island			
Estimated Federal Cost			$13,000,000
Initial Construction		$747,000	
Periodic Nourishment		$12,253,000	
Estimated Non-Federal Cost			$10,600,000
Initial Construction		$ 743,000	
Cash Contributions	$733,000		
Other Costs	$10,000		
Periodic Nourishment		$9,857,000	
Cash Contributions	$9,833,000		
Other Costs	$24,000		
Total Estimated Project Cost			$23,600,000
Initial Construction		$1,490,000	
Periodic Nourishment		$22,110,000	

REMAINING BENEFIT-REMAINING COST RATIO: 8.2 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 6.5 to 1.0 at 7 percent

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENT

Long Key			
Estimated Federal Cost			$26,800,000
Initial Construction		$980,000	
Periodic Nourishment		$25,820,000	
Estimated Non-Federal Cost			$17,700,000
Initial Construction		$ 973,000	
Cash Contributions	$ 912,000		
Other Costs	$ 61,000		
Periodic Nourishment		$16,727,000	
Cash Contributions	$16,687,000		
Other Costs	$ 40,000		
Total Estimated Project Cost			$44,500,000
Initial Construction		$1,953,000	
Periodic Nourishment		$42,547,000	

REMAINING BENEFIT-REMAINING COST RATIO: 4.6 to 1 at 7 percent.

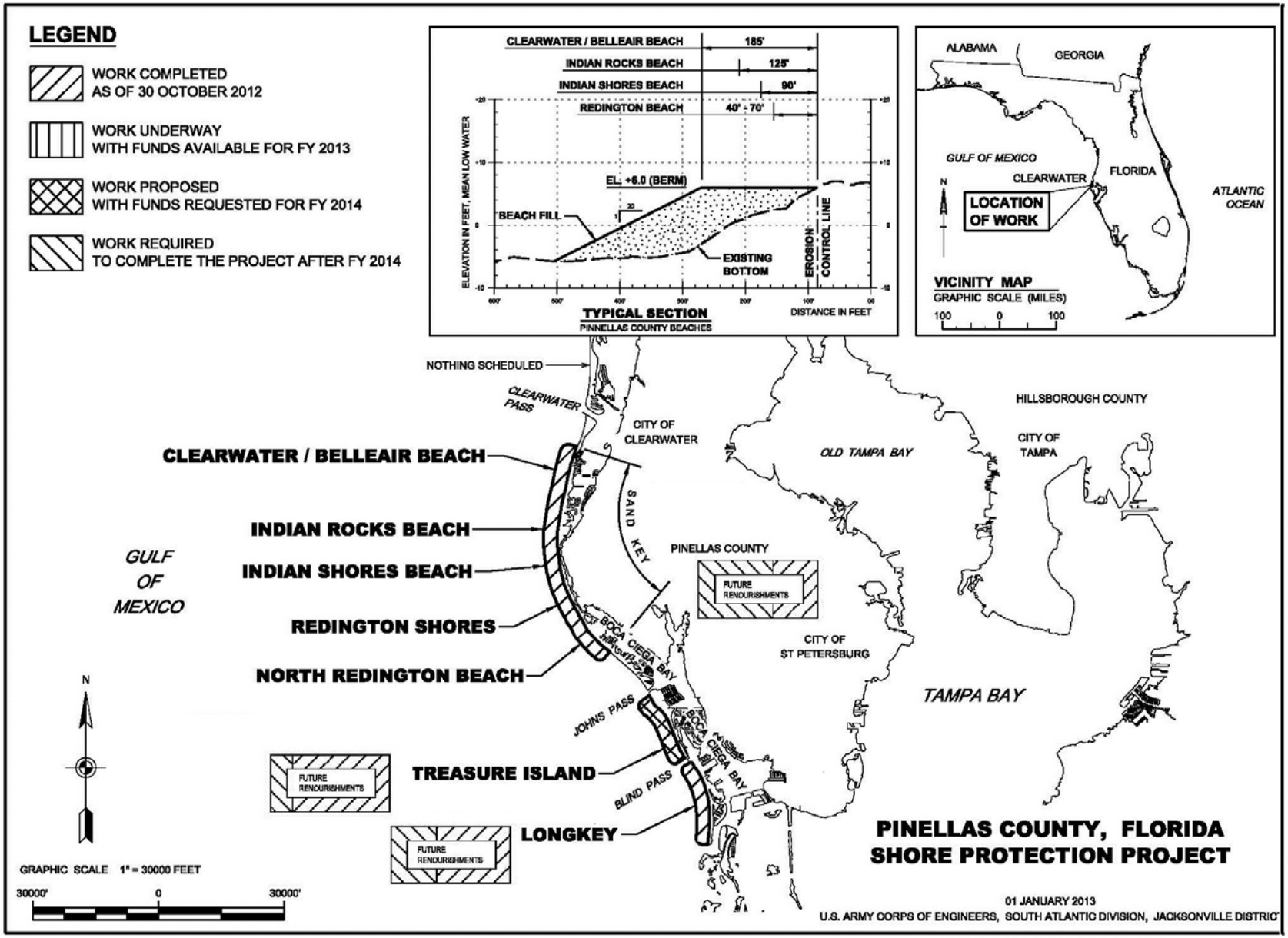
TOTAL BENEFIT-COST RATIO: 0.5 to 1.0 at 7 percent

SUMMARIZED FINANCIAL DATA FOR UNPROGRAMMED SEPARABLE ELEMENT

Clearwater Beach			
Estimated Federal Cost			$21,800,000
Initial Construction		$2,880,000	
Periodic Nourishment		$18,920,000	
Estimated Non-Federal Cost			$13,700,000
Initial Construction		$1,810,000	
Cash Contributions	$1,803,000		
Other Costs	$ 7,000		
Periodic Nourishment		$11,890,000	
Cash Contributions	$11,828,000		
Other Costs	$ 62,000		
Total Estimated Project Cost			$35,500,000
Initial Construction		$4,690,000	
Periodic Nourishment		$30,810,000	

REMAINING BENEFIT-REMAINING COST RATIO: 1.2 to 1.0 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1.0 at 7 percent



PROJECT STATUS MAP (RCS CECW-B-13)

APPROPRIATION TITLE: Construction – Environmental Restoration

PROJECT: South Florida Ecosystem Restoration Program, Florida (SFER) (Continuing)

LOCATION: The SFER Program stretches from the southern Orlando area southward across the Everglades, the Florida Keys, and the contiguous and near-shore waters of South Florida, and across South Florida from east to west including portions of the drainage areas of the Indian River Lagoon and the Caloosahatchee River, as well as population centers along the southeast and southwest coasts. The project area is defined by the political boundaries of the South Florida Water Management District (SFWMD), and includes all of the Everglades. It encompasses an area of approximately 18,000 square miles, which includes all or part of 18 counties in the southeast part of the state of Florida. Principle areas are the Kissimmee River Basin, Lake Okeechobee, Everglades Agricultural Area, Upper East Coast, Lower East Coast, Big Cypress Basin, Water Conservation Areas, Everglades National Park, Southwest Florida, Florida Bay and the Florida Keys.

DESCRIPTION: The objective of the SFER Program is to restore, protect and preserve the South Florida ecosystem including the Everglades, while providing for other water related needs of the region. The SFER Program includes the Central and Southern Florida (C&SF) Project, the Kissimmee River Restoration Project, the Everglades and South Florida (E&SF) Restoration Project, and the Modified Waters Deliveries Project.

The completed C&SF Project includes 1,000 miles of canals, 720 miles of levees and several hundred water control structures, which provide water supply, flood damage reduction, water management and other benefits to south Florida. Under SFER, numerous C&SF projects— including West Palm Beach Canal, C-111 (South Dade), Comprehensive Everglades Restoration Plan (CERP), and Manatee Pass Thru Gates—are being undertaken to address adverse environmental impacts caused by the C&SF project's modification of historic Everglades flows.
The E&SF Restoration projects include the following separable elements: East Coast Canal Structures, Western C-11 Basin, Seminole Big Cypress, Ten Mile Creek, Tamiami Trail (Western Culverts), Florida Keys Carrying Capacity, Lake Okeechobee Water Retention, Southern CREW, and Lake Trafford.

The CERP Picayune Strand (Southern Golden Gate Estates) Restoration Project was authorized under Section 1001(15) of the Water Resources Development Act (WRDA) of 2007. The purpose of this project is to restore and enhance 55,247 acres of wetlands in the Southern Golden Gates Estates area of Picayune Strand and in adjacent public lands by restoring historical overland waterflows to the South while maintaining flood control measures for areas to the North. Implementation of the restoration plan would restore the cypress/freshwater marsh and wet prairie improving the functionality of habitat for the Florida Panther, Smalltooth Sawfish, Manatee and Wood Stork and improve the water quality of coastal estuaries by moderating the large salinity fluctuations caused by freshwater point discharge of the Faka Union Canal. The plan would also aid in protecting the City of Naples eastern Golden Gate wellfield by improving groundwater and aquifer recharge. The project includes a combination of spreader canals, canal plugs, road and tram removal and pump stations for the Prairie, Merritt, Faka Union and Miller Canals.

The CERP Site 1 Impoundment project was authorized under Section 1001(16) of the Water Resources Development Act of 2007. The purpose of the project is to restore 147,000 acres of degraded sawgrass wetlands, reduce water withdrawals and seepage losses from Loxahatchee National Wildlife Refuge and restore and improve the functionality of the habitat for the Wood Stork and Snail Kite. It includes a 1,660-acre project footprint with an eight foot deep above ground impoundment, pump station, discharge gated culvert, one combined service / auxiliary non-gated spillway and one auxiliary non-gated spillway, and a seepage control canal with an associated seepage pump station and overflow weir. An additional gated culvert structure is designed to control stages in L-36 Borrow Canal and North Springs Improvement District discharges into the Hillsboro Canal. Recreation features include boardwalks, viewing platforms, picnic shelters, canoe launches and information kiosks at one site within the footprint.

The CERP Indian River Lagoon (IRL) project was authorized under Section 1001(14) of the Water Resources Development Act of 2007. It is identified as one of the most biologically diverse estuarine system in all of North America by the Smithsonian Marine Institute. The Project Implementation Report (PIR) recommends a plan in Martin, St. Lucie, and Okeechobee Counties that will reduce the damaging effects of watershed runoff, reduce high peak discharges, reduce nutrient loads, provide water quality benefits to control salinity, pesticides, and other pollutants presently discharged to the estuary, restores 117 acres of wetlands including seagrass, restores and improves the functionality of habitats for the Wood Stork, Green Sea Turtle and West Indian Manatee, and provide water supply for agriculture to offset reliance on the Floridian Aquifer. The plan includes 170,000 acre-feet of reservoir storage (C-44 Reservoir, C-23/24 North/South Reservoirs and C-25 Reservoir), and storm water treatment areas (C-44 West/East, C-23, C-24, and C-25), and provides storage on 92,000 acres of natural storage areas (Allapattah, Palmar, and Cypress Creek). The plan may also include steps to remove up to 7,900,000 cubic yards of muck from the St. Lucie River and Estuary.

The Kissimmee Basin includes 3,000 square miles stretching from Orlando to Lake Okeechobee in central Florida. The Kissimmee River Restoration project involves the ecosystem restoration of the historic floodplain to re-establish wetland conditions by implementing the following: modifications to the operation of the upper chain of lakes; modification of various structures; enlargement of canals 36 and 37; backfilling 22 miles of canal 38; excavation of about nine miles of new river channel; removal of two water control structures and locks, floodproofing of developments around the lakes and land acquisition of over 100,000 acres. It restores 110,000 acres of riverine wetland system including beakrush wet prairies, broadleaf march, hardwoods, cypress strands and sawgrass and restores/improves the functionality of habit for the Wood Stork, Caracara,Snail Kite and Bald Eagle. The project also includes acquisition of fee title for lands within the 5-year-floodplain and acquisition of flowage easements for lands between the five-year-flood line and the 100-year-flood line.

The E&SF Project separable elements must meet the following criteria: be within the C&SF Project and its near shore waters: provide immediate, independent, and substantial ecosystem restoration, protection, and preservation benefits; cost less than $25 million in Federal funds; be consistent with the Governor's Commission's Conceptual Plan; and have a local sponsor to contribute a minimum of 50% of the total project cost. The Water Resources Development Act of 2007 amended authorization for the Seminole Big Cypress project to increase the Federal share of project costs from $25 million to $30 million.

The Modified Water Deliveries to Everglades National Park (MWD) involves construction of certain modifications to the C&SF Project water management system and related operational changes to improve water deliveries to Everglades National Park (ENP). The project consists of structural features with the intended purpose of improving the conveyance of water between Water Conservation Areas (WCA) north of ENP and the Shark River Slough within the Park. It also involves acquisition of structures and provides flood mitigation to remaining structures in the 8.5 Square Mile Area (SMA), a residential area adjacent to the Park expansion boundary in East Everglades.

AUTHORIZATION: Flood Control Acts of 1948, 1954, 1960, 1962, 1965, and 1968; Authorization in 1970 under Section 201 of the Flood Control Act of 1965, and the Water Resources Development Acts of 1986, 1988, 1990, 1992,1996, 1999, 2000 and 2007. The Modified Water Deliveries to Everglades National Park was authorized under the Everglades Expansion Act of 1989 (PL 101-229). PL 101-229 specifically directs the Secretary of the Army, in consultation with the Secretary of Interior, to construct modifications to the C&SF Project to improve water deliveries to ENP.

REMAINING BENEFIT-REMAINING COST RATIO: N/A; Ecosystem Restoration Project

TOTAL BENEFIT-COST RATIO: The total benefit cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms. Incremental cost analysis (CE/ICA) was used to calculate the cost effectiveness of building the selected plans for each separable element within the SFER Program. For the CERP each of the projects highlighted in the Plan were further developed and analyzed in Project Implementation Reports and a CE/ICA was completed for each based on cost and environmental benefits. In addition, all projects recommended under the CERP alternative, undergo a Next Added Increment (NAI) analysis to determine what benefits the selected plan contributes to without regard to future CERP projects. It also determines whether sufficient benefits will accrue to justify the cost of the project if no additional CERP projects (other than those already existing or authorized) are implemented.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits have not been quantified in monetary terms.

BASIS OF BENEFIT-COST RATIO: N/A; Ecosystem Restoration Project

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST
Estimated Federal Cost (CoE)			$4,995,563,000	
Programmed Construction		$4,348,133,000		
Un-programmed Construction		$647,430,000		
Estimated Federal Cost (OFA)			$391,308,000	
Programmed Construction		$391,308,000		
Un-programmed Construction		$0		
Estimated Total Federal Cost			$5,386,871,000	
Programmed Construction		$4,739,441,000		
Un-programmed Construction		$647,430,000		
Estimated Non-Federal Cost			$4,145,499,000	
Programmed Construction		$3,788,152,000		
Cash Contributions	$1,703,007,000			
Other Costs	$2,085,145,000			
Un-programmed Construction		$357,347,000		
Cash Contributions	$147,847,000			
Other Costs	$209,500,000			
Total Estimated Programmed Construction Cost			$8,527,593,000	
Total Estimated Un-programmed Construction Cost			$1,004,777,000	
Total Estimated Project Cost			$9,532,370,000	

STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Misc. Completed Works	100	October 1992
CERP	27	TBD
West Palm Beach	87	TBD
C-111 (South Dade)	88	TBD
Manatee Pass Gates	100	September 2012
E Coast Canal	100	September 2004
Western C-111	100	September 2005
Seminole Big Cypress	98	TBD
Ten Mile Creek	TBD	TBD
Tamiami Trail:		
Western Culverts	5	TBD
Florida Keys:		
Carrying Capacity	100	December 2004
Lake Okeechobee:		
Water Retention and Phosphorus Removal	99	January 2013
Southern CREW	90	TBD
Lake Trafford	95	TBD
Kissimmee	97	TBD
Mod Waters Deliveries	98	TBD
Picayune Strand	90	TBD
Entire Project	49	TBD

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CM PL	PHYSICAL COMPLETION SCHEDULE
Allocations to 30 September FY 2010	$1,748,439,000				
Allocations for FY 2011	$129,631,000				
Allocations for FY 2012	$135,790,000				
Conference Allowance for FY 2013	$88,880,000	5/			
Allocations through FY 2013	$2,102,740,000	1/ 2/ 3/ 6/ 48.3			
Estimated Unobligated Carry-In Funds	$12,995,000	4/			
President's Budget for FY 2014	$88,000,000	49.6			
Programmed Balance to Complete after FY 2014	$2,157,393,000				
Un-programmed Balance to Complete after FY 2014	$647,430,000				

1/ $(6,518,000) reprogrammed from the project.
2/ $(3,555,000) rescinded from the project.
3/ $(26,500,000) transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY2014 from prior appropriations for use on this project effort is $12,995,000. Funding in the amount of $19,763,000 will be de-obligated on the Kissimmee River Project in FY2013. These funds will be used to continue work on the Kissimmee Reaches 2 and 3 Backfill construction contracts and the Kissimmee S-69 Weir construction contract upon resolution of land acquisition required by the sponsor.
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $515,306 are included in this amount.
7/For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA:

Pumping Plants	38	Each
Floodway Control & Diversion Structures	235	Each
Relocations		
Highway Bridges	2	Each
Railroads Bridges	58	Each
Canals:		
New River Channel	9	Each
Water Control Structures Removal	2	Each
Locks	25	Each
Canals	999	Miles
Levees	720	Miles
Bridge	7	Each

JUSTIFICATION:

The Central and Southern Florida (C&SF) Project:

The C&SF project was originally authorized and designed as a flood control project in response to the maximum flood of record in 1947. Existing damages, without the project, were $59,693,000 ($366,903,000 at 1 October 1989 price levels). The 1947 flood frequency averages 1 in 25 years over the project area, with an average duration of 70 days. Minor floods occur almost yearly in the project area and major floods occur frequently. This situation is aggravated by wet antecedent conditions followed by heavy seasonal rainfall. The average degree of protection provided by the completed project is about a 10-year flood frequency protection. Approximately 2,853,700 acres are protected. This encompasses 2,765,100 agricultural acres and 88,600 urban acres. The present value of property subject to flood damages is about $12,300,000,000. Property types include residential, commercial, industrial, public, and agricultural.

Average annual damages without the project would be $110,580,000 and $22,536,000 with the project. Damages attributable to urban property are 16.7 percent and 83.3 percent are attributable to rural property. The proportion of average annual damages prevented is 36.8 percent to existing development and 63.2 percent to future development.

Under Public Law 90-483 (River and Harbor Act of 1968), additional project features for the purpose of water supply were added to the Central and Southern Florida project. The storage capacity of the entire project is 2,953,000 average annual acre-feet divided into approximately 1,600,000 acre-feet for urban use by 2020 and 740,000 acre-feet for agricultural use by 2020. The Everglades National Park receives virtually its entire source of water (other than direct rainfall) from the Central and Southern Florida Project. The pumping rate for irrigation of 590 square miles would yield approximately 917,850 acre-feet per year for agricultural use. Recurrent drought conditions with resultant low flows require supplemental irrigation to ensure adequate crop yields.

Restoration projects in the Central and South Florida Project are being conducted under a variety of authorities. Examples include Picayune Strand, which restores 55,247 acres of wetlands and is a key component to connect state and federal preserve lands for plant and animal species as well as enhancement to adjacent wetland habitats; the Indian River Lagoon South project moderates unnatural salinity changes which cause detrimental effects to estuarine communities;

the Site 1 Impoundment Project reduces seepage losses from the natural system and provides habitat improvement, while shifting consumptive water demands off of Loxahatchee National Wildlife Refuge (NWR) and Lake Okeechobee; the West Palm Beach Canal (C-51) project improves the quality of water entering Loxahatchee NWR & Lake Worth Lagoon as well as reducing freshwater pulse flows which adversely affect habitat in Lake Worth Lagoon.

The Modified Water Deliveries to Everglades National Park and C-111 (South Dade) Projects:

The Corps is working in stages to restore natural hydrological conditions in Everglades National Park (ENP). Public Law 90-483 and Public Law 101-229 (Everglades National Park Protection and Expansion Act) authorized modifications to the C&SF project for environmental restoration in the C-111 basin and Shark River Slough. The C-111 (South Dade) effort will help restore natural hydrologic conditions in Taylor Slough within Everglades National Park by providing immediate improvement in flow between upper Everglades Marsh (WCA 3a) and ENP which directly improves habitat for endangered species. Modified Water Deliveries (MWD) will take steps to restore natural hydrological flows to Shark River Slough in the Park. In addition, the Tamiami Trail portion of MWD provides immediate improvement in flow from north across Tamiami Trail (US Hwy 41) to south into ENP which directly improves habitat for endangered species. The Corps will evaluate the success of these projects, and incorporate the lessons learned into implementation efforts conducted under the WRDA 2000 Comprehensive Everglades Restoration Plan (CERP) authority with further steps to improve water deliveries to the park. Due to a significant increase in the costs of the option selected in November 2005 for the Tamiami Trail (Eastern Segment) feature of the Modified Water Deliveries Project, the Corps completed a Limited Reevaluation Report (LRR) to re-examine prior reports and environmental documentation associated with this feature in an effort to re-evaluate the immediate steps to increase flows of water under the highway and into the Park. The Integrated LRR and Environmental Assessment were approved by the Assistant Secretary of the Army for Civil Works on 1 August 2008. The approved plan provides improved flows under the eastern Tamiami Trail and begins the restoration of flow into the historic headwaters of the Shark River Slough in northern Everglades National Park.

Everglades and South Florida Restoration Project:

WRDA 1996 authorized implementation of the Everglades and South Florida (E&SF) Restoration Project in order to provide immediate, independent, and substantial ecosystem restoration, protection and preservation benefits. The authorization permitted implementation of nine projects that were justified on the basis of those benefits. Florida Keys Carrying Capacity Study, East Coast Canal Structure and Western C-11 projects have been completed. Lake Okeechobee Water Retention and Phosphorus Removal project will be completed and transferred to the sponsor in FY 2013. The Ten Mile Creek project, as originally planned, was physically completed in 2006. However, prior to turnover of the project, a determination was made that additional work will need to be performed to allow the project to perform properly. The Seminole Tribe Water Conservation Project located on the Big Cypress Reservation consists of building conveyance canals that will feed newly constructed impoundments. The impoundments function as natural habitats while improving water quality. The water flows from the Big Cypress Reservation and into the Big Cypress National Preserve.

Kissimmee River Restoration Project: Local water resource development of the Kissimmee River began in the late 1800's. In the 1960's, the river was channelized as part of the C&SF Project. Although the project has provided for navigation and reduced flood damages as intended, it also resulted in long-term degradation of the natural ecosystem. The 103-mile river that historically meandered across and inundated about 35,000 acres of wetlands over a broad flood plain was reduced to a 56-mile canal that has successfully contained almost all flows since its completion. The channelization coupled with the modifications of the Lower Basin tributary watersheds and efficient control of floodwaters and regulation of inflows from the Upper Basin significantly altered hydrologic characteristics of the ecosystem. Project formulation and scoping was based on the most cost-effective plan that would meet fish and wildlife resources objectives for restoring ecological integrity. Completion of the project will result in the restoration of 52 miles of river; 27,000 acres of wetlands; improved water quality characteristics for the Kissimmee River; and restored conditions for over 300 fish and wildlife species.

Average annual benefits of the CS&F Project, excluding restoration projects are as follows:

Annual Benefits	Amount
Flood Control	$235,213,000
Municipal and Industrial Water Supply	$25,664,000
Agricultural Water Supply	$27,614,000
Recreation	$11,109,000
Fish and Wildlife	$238,000
Area Redevelopment	$3,012,000
Total	$302,850,000

FISCAL YEAR 2013: The Total unobligated dollars are being applied as follows:

Central and Southern Florida:		
Non-CERP		
Initiate Construction on the C-51 West Palm Beach Canal Trash Rake S-319 Mod	$	6,300,000
Continue Construction on the C-51 West Palm Beach Canal Culvert Repairs	$	6,229,000
Engineering and Design for C-51 West Palm Beach Canal-S319	$	830,000
Engineering and Design for C-51 West Palm Beach Canal-Culvert Repairs	$	841,000
Construction Management for C-51 West Palm Beach Canal-S319	$	1,000,000
Construction Management for C-51 West Palm Beach Canal-Culvert Repairs	$	1,100,000
Continue Negotiation of Project Cost Share Agreement Amendment for C-111 South Dade	$	35,000
Non-CERP Sub-Total	$	16,335,000
CERP		
CERP Design		
Engineering and Design for CERP Remaining Items to include Adaptive Assessment and Monitoring	$	21,121,000
CERP Design Sub-total	$	21,121,000
CERP Indian River Lagoon South C-44 Troup Indian Town (IT)		
Continue Construction on the CERP Indian River Lagoon South C-44 Troup IT	$	2,000,000
Construction Management for CERP Indian River Lagoon South	$	1,000,000
Engineering and Design CERP Indian River Lagoon South	$	1,350,000
Plans and Specifications for CERP Indian River Lagoon South	$	2,999,000
CERP Indian River Lagoon South C-44 Troup IT Sub-total	$	7,349,000
CERP Melaleuca		
Construction Management for CERP Melaleuca Eradication	$	155,000
CERP Melaleuca Sub-total	$	155,000
CERP Site 1 Phase 1		
Construction Management for CERP Site 1 Phase 1 Impoundment	$	845,000
Engineering and Design for CERP Site 1 Phase 1 Impoundment	$	630,000
CERP Site 1 Phase 1 Sub-total	$	1,475,000

FISCAL YEAR 2013: The Total unobligated dollars are being applied as follows: (continued)

CERP Picayune Strand		
Initiate Construction on the CERP Picayune Strand Miller Pump Station	$	71,200,000
Continue Construction on the CERP Picayune Strand Faka Union Pump Station	$	1,500,000
Continue Construction on the CERP Picayune Strand Merritt Pump Station	$	3,000,000
Construction Management for CERP Picayune Strand	$	3,000,000
Engineering and Design for CERP Picayune Strand	$	3,900,000
Plans and Specifications for CERP Picayune Strand	$	2,291,000
CERP Picayune Strand Sub-total	$	84,891,000
CERP Sub-Total	$	114,991,000
Subtotal : Central and Southern Florida	**$**	**131,326,000**
Kissimmee:		
Lower Basin:		
Initiate Construction of McArthur Ditch portion of Reach 2 Backfill /8	$	9,081,000
Initiate Construction of River Acres Contract 2	$	1,500,000
Engineering During Construction	$	308,000
Construction Management	$	1,907,000
Lower Basin Sub-total	$	12,796,000
Upper Basin:		
Continue Real Estate Crediting	$	500,000
Subtotal: Kissimmee Upper & Lower Basin	**$**	**13,296,000**
Everglades and South Florida Ecosystem Restoration:		
Seminole Big Cypress		
Initiate Construction Seminole Big Cypress Basin 2	$	4,100,000
Complete Construction Seminole Big Cypress Basin 4	$	235,000
Construction Management for Seminole Big Cypress	$	416,000
Seminole Big Cypress Sub-Total	$	4,751,000
Maintain Caretaker Status for Ten Mile Creek	$	25,000
Design Review for Sponsor Work In Kind Crediting on Southern Crew	$	25,000
Complete Construction on Lake Okeechobee Water Retention	$	250,000
Subtotal: Everglades and South Florida Ecosystem Restoration	**$**	**5,051,000**
South Florida Ecosystem Restoration FY 2013 Total Unobligated dollars	**$**	**149,673,000**

8/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY2014 from prior appropriations for use on this project effort is $12,995,000. Funding in the amount of $19,763,000 will be de-obligated on the Kissimmee River Project in FY2013. These funds will be used to continue work on the Kissimmee Reach 2 construction contract upon resolution of land acquisition required by the sponsor.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Central and Southern Florida:		
Non-CERP		
Complete Construction on the C-51 West Palm Beach Canal Trash Rake S-319 Mod	$	1,000,000
Continue Construction on the C-51 West Palm Beach Canal Culvert Repairs	$	13,000,000
Engineering and Design for C-51 West Palm Beach Canal	$	1,250,000
Construction Management for C-51 West Palm Beach	$	2,750,000
Engineering and Design for C-111 (South Dade)	$	100,000
Non-CERP Sub-Total	$	18,100,000
CERP		
CERP Design		
Engineering and Design for CERP Remaining Items to include Adaptive Assessment and Monitoring	$	21,500,000
CERP Indian River Lagoon South		
CERP Indian River Lagoon South C-44 Troup Indian Town (IT)		
Complete Construction on the CERP Indian River Lagoon South C-44 Troup IT	$	1,900,000
CERP Indian River Lagoon South C-44 Troup IT Sub-total	$	1,900,000
CERP Indian River Lagoon South C-44 Reservoir		
Initiate Construction on the CERP Indian River Lagoon South C-44 Reservoir	$	10,615,000
Construction Management for CERP Indian River Lagoon South	$	1,800,000
CERP Indian River Lagoon South C-44 Reservoir Sub-total	$	12,415,000
Engineering and Design CERP Indian River Lagoon South	$	2,676,000
Plans and Specifications for CERP Indian River Lagoon South	$	1,000,000
CERP Indian River Lagoon South Sub-total	$	17,991,000
CERP Site 1		
Continue Construction on the CERP Site 1 Phase I Impoundment	$	1,424,000
Construction Management for CERP Site 1 Impoundment Phase 1	$	1,000,000
Engineering and Design CERP Site 1 Impoundment Phase 1	$	576,000
CERP Site 1 Sub-total	$	3,000,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows: (continued)

CERP Picayune Strand		
Continue Construction on the CERP Picayune Strand Miller Pump Station	$	3,000,000
Continue Construction on the CERP Picayune Strand Faka Union Pump Station	$	2,000,000
Complete Construction on the CERP Picayune Strand Merritt Pump Station	$	500,000
Construction Management for CERP Picayune Strand	$	4,927,000
Engineering and Design for CERP Picayune Strand	$	2,300,000
Plans and Specifications for CERP Picayune Strand	$	1,573,000
CERP Picayune Strand Sub-total	$	14,300,000
CERP Sub-Total	$	56,791,000
Subtotal : Central and Southern Florida	**$**	**74,891,000**
Kissimmee:		
Lower Basin:		
Initiate Construction of remaining portion of Reach 2 Backfill /9	$	9,679,000
Initiate Construction of Reach 3 Backfill /9	$	3,778,000
Plans and Specifications/ 9	$	2,500,000
Engineering During Construction	$	340,000
Construction Management	$	1,900,000
Lower Basin Sub-total	$	18,197,000
Upper Basin:		
Continue Real Estate Crediting	$	215,000
Subtotal: Kissimmee	**$**	**18,412,000**
Everglades and South Florida Ecosystem Restoration:		
Seminole Big Cypress		
Complete Construction on the Tamiami Trail Culverts	$	850,000
Continue Construction Seminole Big Cypress Basin 2	$	125,000
Subtotal: Everglades and South Florida Ecosystem Restoration	**$**	**975,000**
South Florida Ecosystem Restoration FY 2014 Total Unobligated Dollars	**$**	**94,278,000**

9/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY2014 from prior appropriations for use on this project effort is $12,995,000. Funding in the amount of $19,763,000 will be de-obligated on the Kissimmee River Project in FY2013. These funds will be used to continue work on the Kissimmee Reaches 2 and 3 Backfill construction contracts and the Kissimmee S-69 Weir construction contract upon resolution of land acquisition required by the sponsor.

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in specific authorizing legislation and the Water Resources Development Act of 1986, 1996, 2000 and 2007 as applicable, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Completed Central and Southern Florida Works:		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	$176,459,000	$0
Cash Contribution/Work-In-Kind	$232,241,000	$0
Subtotal Non-Federal Costs: Completed Central and Southern Florida Works	$408,700,000	$0
Modified Water Deliveries to Everglades National Park (OFA Costs)		
Provide, with credit toward Department of Interior's share of the project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	$156,000	$0
Pay share of project costs and bear a percentage of costs of operation, maintenance, repair, rehabilitation, and replacement of the completed project, or functional portion of the project except water control structures and outlets in Water Conversation Area 3.	$0	$200,000
Subtotal Non-Federal Costs: Modified Water Deliveries to Everglades National Park (applied to OFA Costs)	$156,000	$200,000
C&SF C-111 (South Dade)		
Provide lands, easements, rights of way, and dredged material disposal areas.	$148,280,000	$0
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$419,000	$0
Pay one-half of the cost of the project assigned to flood control and bear a percentage of costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	$13,520,000	$2,119,000
Subtotal Non-Federal Costs: C-111 (South Dade)	$162,219,000	$2,119,000
C&SF West Palm Beach Canal:		
Provide lands, easements, rights of way, and dredged material disposal areas.	$16,011,000	$0
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$ 1,470,000	$0
Pay 12.8 percent of the separable costs allocated to flood control and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of facilities.	$11,182,000	$290,000
Subtotal Non-Federal Costs: West Palm Beach Canal	$28,663,000	$290,000

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
C&SF Manatee Pass-Through Gates:		
Pay applicable percentage of 0%, 15% or 20% based upon authorized cost share of each particular feature of the project and bear cost of operation, maintenance, repair, rehabilitation, and replacement of manatee protection features except for structures S-77, S-78, S-79, S-308 and S308B.	$2,082,000	$450,000
Subtotal Non-Federal Costs: Manatee Pass-Through Gates	$2,082,000	$450,000
C&SF Comprehensive Everglades Restoration Plan (CERP) :		
Provide lands, easements, rights of way, and dredged material disposal areas.	$1,498,180,000	$0
Pay one-half of the cost of the project assigned to flood control and bear one half of the cost of operation, maintenance, repair, rehabilitation, and replacement of CERP facilities.	$1,499,046,000	$0
Subtotal Non-Federal Costs: Comprehensive Everglades Restoration Plan (CERP)	$2,997,226,000	$0
E&SF Lake Okeechobee Water retention & Phosphorus Removal		
Provide, with credit toward the non-Federal 50 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	$3,077,000	$0
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project	$0	$0
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	$11,198,000	$364,000
Subtotal Non-Federal Costs: Lake Okeechobee Water retention & Phosphorus Removal	$14,275,000	$364,000
E&SF Southern CREW		
Provide, with credit toward the non-Federal 50 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	$28,664,000	$0
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$0	$0
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	$11,008,000	$175,000
Subtotal Non-Federal Costs: Southern CREW	$39,672,000	$175,000

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
E&SF East Coast Canal Structures		
Provide, with credit toward the non-Federal 50 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	$0	
Modify or relocate, with credit toward the non-Federal 50 percent share of project costs, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$0	
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	$1,890,000	$150,000
Subtotal Non-Federal Costs: East Coast Canal Structures	$1,890,000	$150,000
E&SF Western C-11 Basin		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	$0	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$0	
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	$9,287,000	
Subtotal Non-Federal Costs: Western C-11 Basin	$9,287,000	
E&SF Seminole Big Cypress		
Provide, with credit toward the non-Federal 50 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	$7,500,000	$0
Modify or relocate, with credit toward the non-Federal 50 percent share of project costs, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$0	$0
Pay 50 percent of the costs allocated to environmental restoration, and bear 50% costs of operation, maintenance, repair, rehabilitation, and replacement.	$22,500,000	$1,075,000
Subtotal Non-Federal Costs: Seminole Big Cypress	$30,000,000	$1,075,000

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
E&SF Ten-Mile Creek		
Provide; with credit toward the non-Federal 50 percent share of project costs; all lands, easements, rights of way, and excavated or dredged material disposal areas.	$5,074,000	
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$0	
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	$23,426,000	
Subtotal Non-Federal Costs: Ten-Mile Creek	$28,500,000	
E&SF Tamiami Trail Western Culverts		
Provide, with credit toward the non-Federal 84 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas	$0	$0
Modify or relocate, with credit toward the non-Federal 84 percent share of project costs, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$0	$0
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	$2,622,000	$250,000
Subtotal Non-Federal Costs: Tamiami Trail Western Culverts	$2,622,000	$250,000
E&SF Lake Trafford		
Provide, with credit toward the non-Federal 95 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	$1,356,000	$0
Modify or relocate, with credit toward the non-Federal 95 percent share of project costs, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$0	$0
Pay 84 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	$20,554,000	$70,000
Subtotal Non-Federal Costs: Lake Trafford	$21,910,000	$70,000

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
E&SF Florida Keys Carrying Capacity		
Provide, with credit toward the non-Federal 50 percent share of project costs, all lands, easements, rights of way, and excavated or dredged material disposal areas.	$0	$0
Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$0	$0
Pay 50 percent of the costs allocated to environmental restoration, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	$3,000,000	$0
Subtotal Non-Federal Costs: Florida Keys Carrying Capacity	$3,000,000	$0
CERP Indian River Lagoon South		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	$811,969,000	$0
Cash Contribution/Work-In-Kind/Bear 50% off costs of operation, maintenance, repair, rehabilitation, and replacement.	$228,879,000	$6,145,000
Subtotal Non-Federal Costs: CERP Indian River Lagoon South	$1,040,848,000	$6,145,000
CERP Picayune Strand		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	$128,654,000	$0
Cash Contribution/Work-In-Kind/Bear 50% off costs of operation, maintenance, repair, rehabilitation, and replacement.	$112,561,000	$2,950,000
Subtotal Non-Federal Costs: CERP Picayune Strand	$241,215,000	$2,950,000
CERP Site 1 Impoundment Phase 1		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	$4,188,000	$0
Cash Contribution/Work-In-Kind/Bear 50% off costs of operation, maintenance, repair, rehabilitation, and replacement.	$48,147,000	$347,000
Subtotal Non-Federal Costs: CERP Site 1 Impoundment Phase 1	$52,335,000	$347,000

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
CERP Melaleuca Eradication		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	$0	$0
Cash Contribution/Work-In-Kind/Bear 50% off costs of operation, maintenance, repair, rehabilitation, and replacement.	$2,206,000	$425,000
Subtotal Non-Federal Costs: CERP Melaleuca Eradication	$2,206,000	$425,000
Kissimmee River		
Provide lands, easements, rights of way, and modify or relocate buildings, utilities, roads, bridges and other facilities.	$407,550,000	$0
Cash Contribution/Work-In-Kind/Bear all costs of operation, maintenance, repair, rehabilitation, and replacement.	$(15,987,000)	$477,000
Subtotal Non-Federal Costs: Kissimmee River	$391,563,000	$477,000

STATUS OF LOCAL COOPERATION: Assurances of local cooperation have been accepted from the local sponsor, the South Florida Water Management District, for all works authorized under the Central and Southern Florida (C&SF) project. The Project Cooperation Agreement (PCA) for the C-111 (South Dade) separable element was executed with the South Florida Water Management District in January 1995. A PCA amendment is under negotiation with the Sponsor and a Post Authorization Change document is being developed for approval of the increase to total project cost and minor design changes. The Design Agreement for the South Florida Water Management District segment of the Comprehensive Everglades Restoration Plan (CERP) was signed on May 12, 2000. Additional Design Agreements for CERP features maybe executed with Seminole Tribe of Florida, the Miccosukee Tribe of Florida, the Florida Department of Environmental Protection and Miami-Dade County.

The Kissimmee Project Cooperation Agreement which reflects the cost sharing outlined in House Document 102-286 dated April 7, 1992 was executed with the South Florida Water Management District (SFWMD) in March 1994. The local sponsor will be required to provide a cash contribution for project costs in excess of land credit (reflecting credit for lands, easements, rights of way, relocations, and disposal areas).

PCAs were executed January 7, 2000 for East Coast Canal Structures, Tamiami Trail Culverts, Western C-11, Seminole Big Cypress, Southern Crew, Lake Okeechobee Water Retention, 10-Mile Creek, and Lake Trafford. A Feasibility Cost Share Agreement (FCSA) was executed December 1998 for Florida Keys Carrying Capacity. Local sponsors include: South Florida Water Management District (SFWMD), Seminole Tribe of Florida, and the Florida Department of Community Affairs (DCA).

PCAs were executed with the South Florida Water Management District September 1994 and July 2001 for the Modified Water Deliveries Project to implement modifications to the C&SF Project to improve water deliveries into Everglades National Park. PCA Amendment No. 2 was executed August 2008 for Tamiami Trail Modification

STATUS OF LOCAL COOPERATION (Continued)

The CERP Master Agreement was executed on 13 August 2009 between the Corps and the South Florida Water Management District. A Project Partnering Agreement (PPA) was executed on the CERP: Picayune Strand project in August 2009 with the South Florida Water management District. The CERP Design Agreement was amended on 13 August 2009 to reflect authority to balance cost share of design and construction activities across CERP projects. Four additional PPAs were executed with SFWMD for CERP projects in FY 2010: Melaleuca Eradication and Other Exotic Plants (July), L-31 North Seepage Management Pilot Project (July), Site 1 Impoundment Project – Part 1 (August), and the Indian River Lagoon South Project – Phase 1 (September). Five Pre-Partnership Credit Agreements (PPCA) were executed with the South Florida Water management District in August 2009: Picayune Strand, Indian River Lagoon South, C-43 Caloosahatchee River West Basin Storage Reservoir, C-111 Spreader Canal, and the Biscayne Bay Costal Wetlands projects.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps cost estimate for the Corps' share of the overall restoration effort) cost estimate of $4,995,563,000 is an decrease of $26,115,000 from the latest estimate ($4,969,448,000) presented to Congress (FY 2013). The changes include the following:

Item	Amount
Price Escalation of Construction Features	$44,837,000
Post Contract Award and Other Estimating Adjustments for Kissimmee and CERP Picayune Strand	27,261,000
Favorable Bids for Construction Contracts for Kissimmee River	($3,799,000)
Reduced scope of work for survey contract on IRL-S and construction of C-111 South Dade	($25,305,000)
Adjustments in Real Estate and project features for Kissimmee River, C&SF C-111 South Dade, and CERP Picayune Strand Restoration	($16,879,000)
Total	$26,115,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT:

The latest Programmatic Environmental Impact Statements for Central and Southern Florida project was the Comprehensive Review Study in April 1999. NEPA documents have also been completed for the Indian River Lagoon South, Picayune Strand, Site 1 Impoundment, Melaleuca Eradication, C-111 Spreader Canal, Caloosahatchee River (C-43) West Basin Storage Reservoir, Broward County Water Preserve Areas, and Biscayne Bay Coastal Wetlands projects.

The final Environmental Impact Statement for the Kissimmee project was filed with EPA on April 5, 1992. A supplement to the Environmental Impact Statement was integrated into the Upper Basin project modification report.

NEPA documents were completed prior to execution of the PCA for East Coast Canal Structures, Tamiami Trail Culverts (Western Culverts), Western C-11, Seminole Big Cypress, Southern Crew, Lake Okeechobee Water Retention, 10-Mile Creek, and Lake Trafford.

OTHER INFORMATION: Funds to initiate preconstruction planning and construction on the Central and Southern Florida project were appropriated in FY 1950.

Modified Water Deliveries to Everglades National Park Project: The Everglades National Park Protection and Expansion Act, signed December 13, 1989, authorized construction of works required to take steps to improve water deliveries to Shark River Slough in Everglades National Park, construction of flood mitigation works for the residential area in the East Everglades, and acquisition of 107,600 acres of privately owned wetlands in the East Everglades. The Department of the Interior and the State of Florida acquired the lands included in the ENP expansion area and the Secretary of the Army has responsibility for constructing all project modifications. Under the initial implementation plan, funds were appropriated to the National Park Service and transferred to the Corps of Engineers for this purpose. From FY 2006 to FY 2008, Congress provided funding for this project to both the National Park Service and the Corps of Engineers. All subsequent funding is expected to be provided through National Park Service appropriations. The construction of the final project components, the Tamiami Trail bridge and roadway raising, was initiated in FY 2010.

The Kissimmee Restoration Project was authorized by the Water Resources Development Act of 1992. The project cooperation agreement was executed in March 1994. Engineering and design and construction are on-going. Construction was initiated in FY 1997. A Post Authorization Change is being developed to address increased project costs in upper basin of the Kissimmee River that can be used to support a project reauthorization. The Kissimmee Basin Modified Water Control Plan (KBMWCP) Environmental Impact Statement effort will include an operational and structural analysis of the post-Kissimmee River Restoration operations for the existing and new structures in the Upper and Lower Kissimmee Basins.

The Water Resources Development Act of 1992 authorizes the Chief of Engineers to review the Central and Southern Florida (C&SF) project to determine whether modifications to the existing project are advisable at the present time due to significantly changed physical, biological, demographic, or economic conditions, with particular reference to modifying the project or its operation for improving the quality of the environment, improving protection of the aquifer, and improving the integrity, capability, and conservation of urban water supplies affected by the project or its operation. The central organizing theme of the Comprehensive Restudy was the restoration of the South Florida ecosystem while accommodating other demands for water and related land resources in south Florida. Recognizing the complexity of ecological restoration and the extensive interaction between the ecosystem and other uses of water and related land resources, oversight of the reconnaissance level study effort was provided by the interagency South Florida Ecosystem Restoration Task Force, which continues to provide policy guidance, interagency coordination, and facilitate appropriate agency participation. The Water Resources Development Act of 1996 (Section 528) required that a Comprehensive Restudy feasibility report be submitted to Congress, along with a Programmatic Environmental Impact Statement, in July 1999. The Final Integrated Feasibility Report and Programmatic Environmental Impact Statement were submitted to Congress on July 1, 1999. The report provided a Comprehensive Everglades Restoration Plan (CERP). Congress authorized this plan in WRDA 2000 as a conceptual framework for modifications and operational changes to the C&SF Project, providing specific authorization for 10 projects totaling $1,100,000,000 (including $100,000,000 for adaptive assessment and monitoring programs) and 4 pilot projects totaling $69,000,000, and to allow for implementation of projects under a programmatic authority, not to exceed $206,000,000. Two additional pilot projects that were part of the CERP were authorized in the WDRA of 1999 for $29,000,000. The Energy and Water Appropriations Act of FY 2000, Public Law 106-50 appropriated the first funds to initiate design of elements of the CERP.

The Water Resources Development Act of 2007 provided authorization for the following three CERP projects: Picayune Strand, Indian River Lagoon South and Site 1 Impoundment. It also provided a new authorized project cost for the Hillsboro and Lake Okeechobee ASR Pilot and the Caloosahatchee ASR Pilot projects; and a provision for the establishment of Section 902 limits for the Programmatic Authority projects.

OTHER INFORMATION (Continued)

The Indian River Lagoon South Feasibility Study was initiated in 1996. This study evaluated potential modifications to the C&SF Project for ecological restoration of Indian River Lagoon ecosystem. A final feasibility report, which included components of the CERP, was submitted to HQUSACE in FY02. The Project Implementation Report (PIR), required by WRDA 2000, for Indian River Lagoon South was completed August 2004. A Chief's Report on the PIR was signed

August 4, 2004. Construction was authorized in WRDA 2007. Construction of the intake canal of the C-44 Reservoir and STA component was initiated in July 2011 and is scheduled for completion in March 2014.

The Picayune Strand Restoration Project: This project involves the restoration of natural flow across roughly 90 square miles in western Collier County, which were drained in the early 1960's. The project will restore wetlands in Picayune Strand (an abandoned real estate development formerly known as Southern Golden Gates Estates) and adjacent public lands by reducing over drainage while restoring a natural and beneficial sheetflow of water to the Ten Thousand Islands National Wildlife Refuge. Additionally, the project will benefit the endangered Florida panther, and improve wetland/upland mosaic habitat west of the Everglades. The Picayune Strand Project Implementation Report, which is a component of the Comprehensive Plan, was completed in December 2004. A Chief's Report on the PIR was signed on September 15, 2005. Construction was authorized in WRDA 2007. Construction was initiated with funds provided by the non-Federal sponsor and continues with the COE appropriated funds. Specifically, the local sponsor, South Florida Water Management District, completed construction of some of the road demolition and plugging of the Prairie canals. The Corps will complete the remaining construction of 3 pump stations (with capacities of 800, 2650 and 1200 cubic feet per second), road removal and plugging of canals. FY 2009 regularly appropriated and ARRA funds were used to award the first pump station, the Merritt pump station, in October 2009 and it is scheduled for completion in FY 2013 and transfer to the sponsor in FY 2014. The second pump station (Faka Union) was awarded on November 22, 2010 and is scheduled for completion in FY 2014 with transfer to the sponsor in FY 2015. Miller Pump station is currently under design and is scheduled to initiate construction in FY 2013. The area south and west of the project is currently under analysis to determine if flood mitigation features will be necessary to maintain current (year 2000) levels of flood risk. A multi-agency sub-team determined that the project will likely affect an established manatee warm-water refuge at the southern end of the project and designed a mitigation project that will begin construction in FY 2013. A Post Authorization Change is being developed to address increased project costs for the project due to price escalation and increases in supplies and materials for construction of the pump stations. The section 902 limit will not be exceeded in FY 2014.

The Site 1 Impoundment Project Implementation Report, which is a component of the Comprehensive Plan, was completed in August 2006. A Chief's Report on the PIR was signed on December 19, 2006, construction was authorized in WRDA 2007 and the PHI 1 construction contract was awarded in August 2010 using ARRA funds.

A Project Implementation Report for Broward County WPA, which is a component of the Comprehensive Plan, was completed in April 2007. However the final report was on hold pending a decision on the CERP land valuation policy, which was resolved in August 2009. The final report has been modified to reflect current CERP land valuation guidance as well as policy updates required since 2007. The Chief's Report was signed on May 21, 2012. The Record of Decision was signed and transmitted to Congress on November 2, 2012.

The Caloosahatchee River (C-43) West Basin Storage Reservoir Project Implementation Report, which is a component of the Comprehensive Plan, was completed in September 2007. However the final report was on hold pending a decision on the CERP land valuation policy, which was resolved in August 2009. A final report was prepared based on current CERP land valuation guidance and submitted to Headquarters November 17, 2009. The Chief's Report was signed in March 2010 and a Supplemental Chief's Report was signed in January 2011 to clarify cost sharing requirements on recreational features. The Record of Decision was signed and transmitted to Congress on April 13, 2011.

OTHER INFORMATION (Continued)

The C-111 Spreader Canal Project Implementation Report, which is a component of the Comprehensive Plan, was completed in September 2009. The final PIR and Environmental Impact Statement (EIA) were approved at the Civil Works Review Board in December 2009. The Chief's Report was signed on January 31, 2012. The Record of Decision was signed on July 19, 2012 and transmitted to Congress on July 20, 2012.

The Biscayne Bay Coastal Wetlands Project Implementation Report, which is a component of the Comprehensive Plan, was completed in August 2011. The final PIR and Environmental Impact Statement (EA) were approved at the Civil Works Review Board in September 2011. The Chief's Report was signed on May 2, 2012. The Record of Decision was signed and transmitted to Congress on September 19, 2012.

The Everglades and South Florida Restoration project authorization limit of a total federal funding of $75 million was increased to $95 million in WRDA 2007. It also provided for an increased project Federal funding cap on the Seminole Big Cypress project from $25 million to $30 million. The local sponsors have elected, on some projects, to fund more than 50% of project costs to complete those projects.

The Enacted Energy and Water Development Appropriations Act of 2010 included a general provision to increase the Everglades and South Florida Ten Mile Creek federal funding cap by $3.5 million, an increase from $25 million to $28.5 million, to complete a Post Authorization Change Report (PAC) and continue preventative maintenance. The PAC will evaluate options to address project design deficiencies and identify cost effective remedies. While the PAC is being completed, the constructed facility will be maintained in a minimum caretaker status, through 2013, to protect the property for health and safety.

Post Authorization Change (PAC) reports are being developed to address increased project costs in upper basin of the Kissimmee River and the CERP Picayune Strand Restoration project that can be used to support project reauthorizations. The current project cost estimates and work planned for FY 2014 for the Kissimmee River and the CERP Picayune Strand Restoration projects will not exceed the Section 902 limit on either project. Work planned to complete the CERP Site I Phase I construction in FY 2015 will not exceed the section 902 limit.

Funds to initiate construction for the Kissimmee River Restoration were appropriated in FY 1993. The Project Cost Share Agreement was signed with the South Florida Water Management District March 22, 1994. The current Total Project cost is approximately $783,227,000 and will complete in FY 2016. The project was authorized in WRDA 1992 and separated the total project cost into two separate portions, the Kissimmee River know as the "Lower Basin" at a cost of $426,885,000 and the Kissimmee River Headwaters known as the "Upper Basin" at a cost of $92,210,000. The current Section 902 limit for the Lower Basin is with inflation is $779,147,000 and the current Section 902 limit in the Upper Basin with inflation is $187,243,000. The current project cost in the Lower Basin is $568,393,000 which does not exceed the Section 902 Limit. However the current project cost in the Upper Basin is $214,834,000 which exceeds the 902 limit by more than 15 percent. Construction was completed in the Upper Basin in December 2012; the Section 902 limit is exceeded by the excess real estate credits that the Sponsor has estimated they will submit for final crediting. Therefore the $58,064 in estimated additional credits will not be afforded to the non Federal Sponsor until the PAC is approved and results in an amended authorization to increase the total project cost in the Upper Basin portion of the project. A proposed change to the authorized limit to combine both the Upper and Lower Basin cost estimates into one total authorized project cost was included in the Fiscal Year 2013 Senate Committee Mark Up.

OTHER INFORMATION (Continued)

As of the date of this J-sheet, the FY 2013 distribution of funds reflects the current schedule and a $54,000,000 carry-in due to the following revised actions in FY 2012: a) $30,000,000 due to a minimum of an 18 month delay in the execution of the C-111 South Dade PPA; and, b) $24,000,000 due to savings in FY 2012 based on actual contract award values as compared to the budgeted estimate and delayed contract awards Additionally, two construction contracts were terminated for convenience on the Kissimmee River project in FY2013 due to land issues related to operation of the features. The terminations resulted in a de-obligation of funds in the amount of $19,763,000 in FY2013, of which $12,995,000 is expected to be carried into FY2014. These funds will be used for the S-69 Weir construction contract and the Reaches 2 and 3 Backfill construction contracts The Reaches 2 and 3 Backfill contracts are dependent upon resolution of land acquisition required by the sponsor.

SUMMARIZED FINANCIAL DATA – Separable Elements

C&SF Miscellaneous Completed Work

Estimated Federal Cost (CoE)			$934,900,000
Programmed Construction		$316,503,000	
Unprogrammed Construction		$618,397,000	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$934,900,000
Programmed Construction		$316,503,000	
Unprogrammed Construction		$618,397,000	
Estimated Non-Federal Cost			$408,700,000
Programmed Construction		$84,118,000	
Cash Contributions	$58,843,000		
Other Costs	$25,275,000		
Unprogrammed Construction		$324,582,000	
Cash Contributions	$173,398,000		
Other Costs	$151,184,000		
Total Estimated Programmed Construction Cost			$400,621,000
Total Estimated Unprogrammed Construction Cost			$942,979,000
Total Estimated Project Cost			$1,343,600,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

Modified Water Deliveries to Everglades National Park

Estimated Federal Cost (CoE)			$77,493,000
Programmed Construction		$77,493,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$339,507,000
Programmed Construction		$339,507,000	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$417,000,000
Programmed Construction		$417,000,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$156,000
Programmed Construction		$156,000	
Cash Contributions	$156,000		
Other Costs	$0		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$417,156,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$417,156,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

C&SF C-111 (South Dade)

Estimated Federal Cost (CoE)				$156,521,000
Programmed Construction		$156,521,000	1/	
Unprogrammed Construction		$0		
Estimated Federal Cost (OFA)				$5,801,000
Programmed Construction		$5,801,000		
Unprogrammed Construction		$0		
Estimated Total Federal Cost				$162,322,000
Programmed Construction		$162,322,000		
Unprogrammed Construction		$0		
Estimated Non-Federal Cost				$162,219,000
Programmed Construction		$162,219,000		
Cash Contributions	$13,520,000			
Other Costs	$148,699,000			
Unprogrammed Construction		$0		
Cash Contributions	$0			
Other Costs	$0			
Total Estimated Programmed Construction Cost				$324,541,000
Total Estimated Unprogrammed Construction Cost				$0
Total Estimated Project Cost				$324,541,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/. Fed cost includes $103K for Independent External Peer Review which is included in the total project cost, but is not to be cost shared with the local sponsor

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

C&SF West Palm Beach Canal

Estimated Federal Cost (CoE)			$320,837,000
Programmed Construction		$320,837,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$46,000,000
Programmed Construction		$46,000,000	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$366,837,000
Programmed Construction		$366,837,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$28,663,000
Programmed Construction		$28,663,000	
Cash Contributions	$11,182,000		
Other Costs	$17,481,000		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$395,500,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$395,500,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

C&SF Manatee Pass-Through Gates

Estimated Federal Cost (CoE)			$14,578,000
Programmed Construction		$14,578,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$14,578,000
Programmed Construction		$14,578,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$2,082,000
Programmed Construction		$2,082,000	
Cash Contributions	$2,082,000		
Other Costs	$0		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$16,660,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$16,660,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

Comprehensive Everglades Restoration Plan (CERP)

Estimated Federal Cost (CoE)			$3,004,570,000	1/
Programmed Construction		$3,004,570,000		
Unprogrammed Construction		$0		
Estimated Federal Cost (OFA)			$0	
Programmed Construction		$0		
Unprogrammed Construction		$0		
Estimated Total Federal Cost			$3,004,570,000	
Programmed Construction		$3,004,570,000		
Unprogrammed Construction		$0		
Estimated Non-Federal Cost			$2,997,226,000	
Programmed Construction		$2,997,226,000		
Cash Contributions	$1,499,046,000			
Other Costs	$1,498,180,000			
Unprogrammed Construction		$0		
Cash Contributions	$0			
Other Costs	$0			
Total Estimated Programmed Construction Cost			$6,001,796,000	
Total Estimated Unprogrammed Construction Cost			$0	
Total Estimated Project Cost			$6,001,796,000	

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Rollup summary for all CERP funding, includes costs for the four projects authorized for construction; Picayune Strand Restoration, Indian River Lagoon South, Site 1 Impoundment and Melalueca Eradication. The Fed cost also includes $1.116M for Independent External Peer Review which is included in the total project cost, but is not to be cost shared with the local sponsor.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Lake Okeechobee

Estimated Federal Cost (CoE)			$14,275,000
Programmed Construction		$14,275,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$14,275,000
Programmed Construction		$14,275,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$14,275,000
Programmed Construction		$14,275,000	
Cash Contributions	$11,198,000		
Other Costs	$3,077,000		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$28,550,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$28,550,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Southern CREW

Estimated Federal Cost (CoE)			$332,000	
Programmed Construction		$332,000		
Unprogrammed Construction		$0		
Estimated Federal Cost (OFA)			$0	
Programmed Construction		$0		
Unprogrammed Construction		$0		
Estimated Total Federal Cost			$332,000	
Programmed Construction		$332,000		
Unprogrammed Construction		$0		
Estimated Non-Federal Cost			$39,672,000	1/
Programmed Construction		$39,672,000		
Cash Contributions	$11,008,000			
Other Costs	$28,664,000			
Unprogrammed Construction		$0		
Cash Contributions	$0			
Other Costs	$0			
Total Estimated Programmed Construction Cost			$40,004,000	
Total Estimated Unprogrammed Construction Cost			$0	
Total Estimated Project Cost			$40,004,000	

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Construction assigned to sponsor due to Federal funding cap on Everglades and South Florida program.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF East Coast Canal Structures

Estimated Federal Cost (CoE)			$1,890,000
Programmed Construction		$1,890,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$1,890,000
Programmed Construction		$1,890,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$1,890,000
Programmed Construction		$1,890,000	
Cash Contributions	$1,890,000		
Other Costs	$0		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$3,780,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$3,780,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Western C-11 Basin

Estimated Federal Cost (CoE)				$9,208,000
Programmed Construction			$9,208,000	
Unprogrammed Construction			$0	
Estimated Federal Cost (OFA)				$0
Programmed Construction			$0	
Unprogrammed Construction			$0	
Estimated Total Federal Cost				$9,208,000
Programmed Construction			$9,208,000	
Unprogrammed Construction			$0	
Estimated Non-Federal Cost				$9,287,000
Programmed Construction			$9,287,000	
Cash Contributions	$9,287,000	1/		
Other Costs	$0			
Unprogrammed Construction			$0	
Cash Contributions	$0			
Other Costs	$0			
Total Estimated Programmed Construction Cost				$18,495,000
Total Estimated Unprogrammed Construction Cost				$0
Total Estimated Project Cost				$18,495,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/. Non Federal Cash Contribution includes $79.5K for a betterment which is not included as part of cost share with the local sponsor.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Seminole Big Cypress

Estimated Federal Cost (CoE)			$30,000,000
Programmed Construction		$30,000,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$30,000,000
Programmed Construction		$30,000,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$30,000,000
Programmed Construction		$30,000,000	
Cash Contributions	$22,500,000		
Other Costs	$7,500,000		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$60,000,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$60,000,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Ten Mile Creek

Estimated Federal Cost (CoE)			$28,500,000
Programmed Construction		$28,500,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$28,500,000
Programmed Construction		$28,500,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$28,500,000
Programmed Construction		$28,500,000	
Cash Contributions	$23,426,000		
Other Costs	$5,074,000		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$57,000,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$57,000,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Tamiami Trail (Western Culverts)

Estimated Federal Cost (CoE)				$2,622,000
Programmed Construction		$2,622,000		
Unprogrammed Construction		$0		
Estimated Federal Cost (OFA)				$0
Programmed Construction		$0		
Unprogrammed Construction		$0		
Estimated Total Federal Cost				$2,622,000
Programmed Construction		$2,622,000		
Unprogrammed Construction		$0		
Estimated Non-Federal Cost			1/	$2,622,000
Programmed Construction		$2,622,000		
Cash Contributions	$2,622,000			
Other Costs	$0			
Unprogrammed Construction		$0		
Cash Contributions	$0			
Other Costs	$0			
Total Estimated Programmed Construction Cost				$5,244,000
Total Estimated Unprogrammed Construction Cost				$0
Total Estimated Project Cost				$5,244,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Construction assigned to sponsor due to Federal funding cap on Everglades and South Florida program.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Lake Trafford

Estimated Federal Cost (CoE)			$4,134,000	
Programmed Construction		$4,134,000		
Unprogrammed Construction		$0		
Estimated Federal Cost (OFA)			$0	
Programmed Construction		$0		
Unprogrammed Construction		$0		
Estimated Total Federal Cost			$4,134,000	
Programmed Construction		$4,134,000		
Unprogrammed Construction		$0		
Estimated Non-Federal Cost			$21,910,000	1/
Programmed Construction		$21,910,000		
Cash Contributions	$20,554,000			
Other Costs	$1,356,000			
Unprogrammed Construction		$0		
Cash Contributions	$0			
Other Costs	$0			
Total Estimated Programmed Construction Cost			$26,044,000	
Total Estimated Unprogrammed Construction Cost			$0	
Total Estimated Project Cost			$26,044,000	

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Construction assigned to sponsor due to Federal funding cap on Everglades and South Florida program.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Florida Keys Carrying Capacity

Estimated Federal Cost (CoE)			$3,000,000
Programmed Construction		$3,000,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$3,000,000
Programmed Construction		$3,000,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$3,000,000
Programmed Construction		$3,000,000	
Cash Contributions	$3,000,000		
Other Costs	$0		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$6,000,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$6,000,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

E&SF Letter Report Development

Estimated Federal Cost (CoE)			$1,039,000
Programmed Construction		$1,039,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$1,039,000
Programmed Construction		$1,039,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$0
Programmed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$1,039,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$1,039,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

CERP Indian River Lagoon South

Estimated Federal Cost (CoE)			$1,040,848,000
Programmed Construction		$1,040,848,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$1,040,848,000
Programmed Construction		$1,040,848,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$1,040,848,000
Programmed Construction		$1,040,848,000	
Cash Contributions	$228,879,000		
Other Costs	$811,969,000		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$2,081,696,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$2,081,696,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

CERP Picayune Strand

Estimated Federal Cost (CoE)			$241,215,000
Programmed Construction		$241,215,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$241,215,000
Programmed Construction		$241,215,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$241,215,000
Programmed Construction		$241,215,000	
Cash Contributions	$112,561,000		
Other Costs	$128,654,000		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$482,430,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$482,430,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

CERP Site 1 Impoundment Phase 1

Estimated Federal Cost (CoE)			$52,335,000
Programmed Construction		$52,335,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$52,335,000
Programmed Construction		$52,335,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$52,335,000
Programmed Construction		$52,335,000	
Cash Contributions	$48,147,000		
Other Costs	$4,188,000		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$104,670,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$104,670,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

CERP Melaleuca Eradication

Estimated Federal Cost (CoE)			$2,206,000
Programmed Construction		$2,206,000	
Unprogrammed Construction		$0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$2,206,000
Programmed Construction		$2,206,000	
Unprogrammed Construction		0	
Estimated Non-Federal Cost			$2,206,000
Programmed Construction		$2,206,000	
Cash Contributions	$2,206,000		
Other Costs			
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$4,412,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$4,412,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

Kissimmee River Lower Basin

Estimated Federal Cost (CoE)			$310,637,000 1/
Programmed Construction		$310,637,000	
Unprogrammed Construction		0	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$310,637,000
Programmed Construction		$310,637,000	
Unprogrammed Construction		$0	
Estimated Non-Federal Cost			$257,756,000
Programmed Construction		$257,756,000	
Cash Contributions	$683,000		
Other Costs	$257,073,000		
Unprogrammed Construction		$0	
Cash Contributions	$0		
Other Costs	$0		
Total Estimated Programmed Construction Cost			$568,393,000
Total Estimated Unprogrammed Construction Cost			$0
Total Estimated Project Cost			$568,393,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Kissimmee project cost shared 50/50. Fed cost includes $51K for Independent External Peer Review which is included in the total project cost, but is not to be cost shared with the local sponsor.

SUMMARIZED FINANCIAL DATA – Separable Elements (Continued)

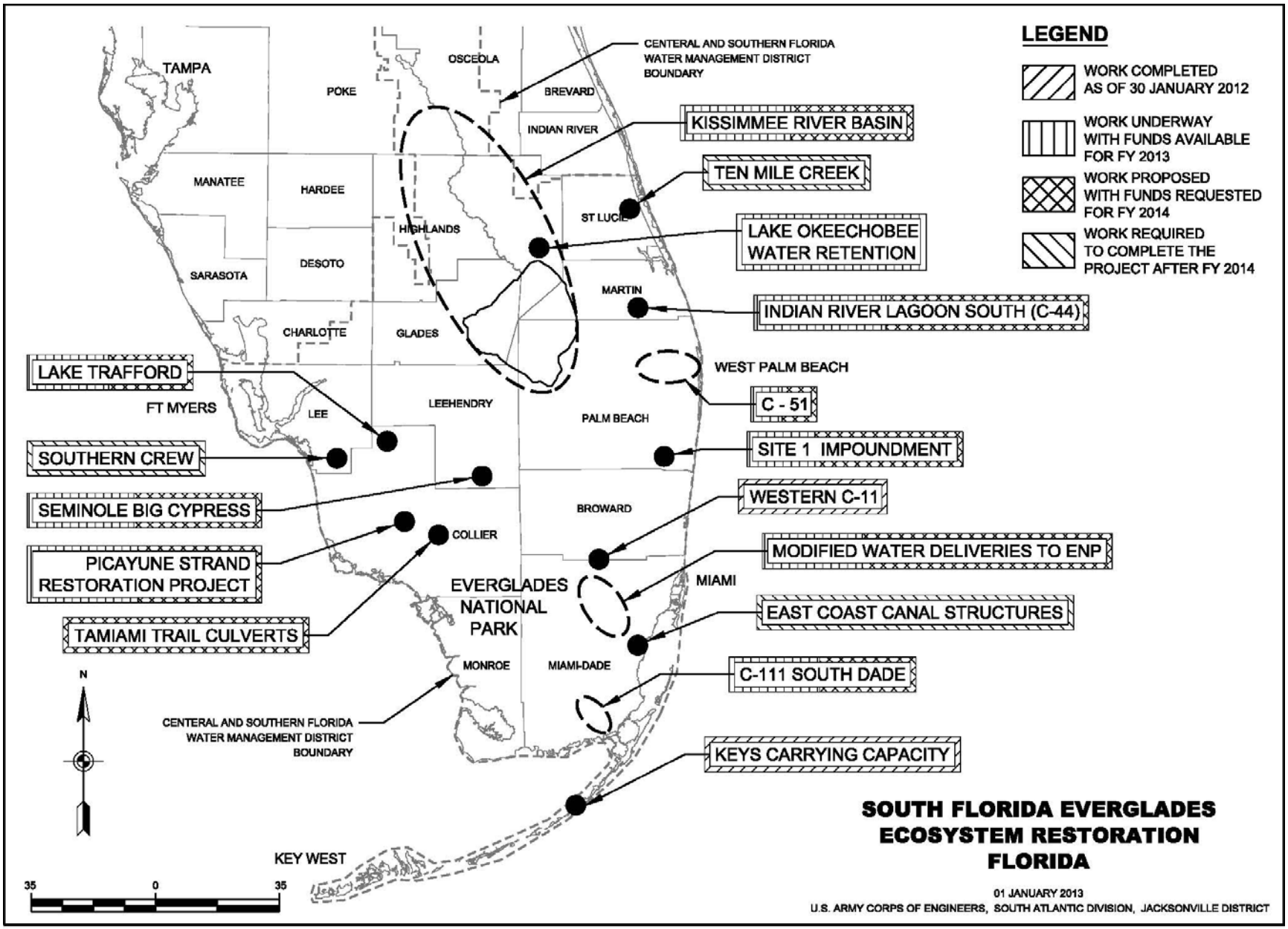
Kissimmee River Upper Basin

Estimated Federal Cost (CoE)			$81,027,000 1/
Programmed Construction		$51,994,000	
Unprogrammed Construction		$29,033,000	
Estimated Federal Cost (OFA)			$0
Programmed Construction		$0	
Unprogrammed Construction		$0	
Estimated Total Federal Cost			$81,027,000
Programmed Construction		$51,994,000	
Unprogrammed Construction		$29,033,000	
Estimated Non-Federal Cost			$133,807,000
Programmed Construction		$104,776,000	
Cash Contributions	$12,343,000		
Other Costs	$92,433,000		
Unprogrammed Construction		$29,031,000	
Cash Contributions	($29,013,000)		
Other Costs	$58,044,000		
Total Estimated Programmed Construction Cost			$156,770,000
Total Estimated Unprogrammed Construction Cost			$58,064,000
Total Estimated Project Cost			$214,834,000

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

1/ Kissimmee project cost shared 50/50. Fed cost includes $50K for Independent External Peer Review which is included in the total project cost, but is not to be cost shared with the local sponsor.



PROJECT STATUS MAP (RCS CECW-B-13)

APPROPRIATION TITLE: Construction - Channels and Harbors (Navigation)

PROJECT: Tampa Harbor, Florida Dredged Material Disposal Facility (Continuing)

LOCATION: Tampa Harbor is located about midway along the Gulf coast of Florida, approximately 85 miles southwest of Orlando, including both Tampa and Hillsborough Bays.

DESCRIPTION: The authorized Tampa Harbor Federal Navigation Project, Florida, includes approximately 67 miles of channels, at various depths and widths, in Hillsborough and Pinellas counties. The project is comprised of two major bay segments—Tampa Bay (TB) and Hillsborough Bay (HB)—and includes both Federal and non-Federal channels. The Final Dredged Material Management Plan (DMMP) for the Tampa Harbor Project, Florida, was approved on April 17, 2002. The DMMP recommended a base plan, along with raising the dikes of Dredged Material Management Areas (DMMAs) 2-D and 3-D. United States Army Corps of Engineers Engineering Regulation 1105-2-100 requires periodic updates of DMMPs to reflect current conditions. The latest DMMP update was approved by South Atlantic Division, U.S. Army Corps of Engineers in April 2012 and covers the planning horizon from 2010 to 2030. For Federal dredging events that take place from the entrance channel through Cut B (TB), material is placed in the Ocean Dredged Material Disposal Site (ODMDS). For Federal dredging events that take place from Cut C (TB) through all other Federal cuts in the Tampa Harbor Federal Project, material is placed in DMMA 3-D. Only non-Federal dredged material would be placed in DMMA 2-D. Any placement, expansion, or other modifications of DMMA 2-D would be the responsibility of the local sponsor.

AUTHORIZATION: Rivers and Harbors Act of 1899 and the Water Resources Development Act of 1976.

REMAINING BENEFIT-REMAINING COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

TOTAL BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

INITIAL BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

BASIS OF BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement			$17,325,000				
					Disposal Area 3-D Raising	19	8/ TBD
Future Non-Federal Reimbursement		$ 2,300,000					
Estimated Federal Cost (Ultimate)			$15,025,000				
Estimated Non-Federal Cost			$ 8,075,000				
Cash Contributions	$ 5,660,000						
Other Costs	$ 115,000						
Reimbursements	$ 2,300,000						
Navigation	$ 2,300,000						
Total Estimated Project Cost			$23,100,000	9/			
Allocations to 30 September 2010		$ 0					
Allocation for FY 2011		$ 0					
Allocation for FY 2012		$ 2,940,000					
Conference Allowance for FY 2013		$ 8,305,000	5/				
Allocations through FY 2013		$11,686,000	1/ 2/ 3/ 6/	67.5			
Estimated Unobligated Carry-In Funds		$ 0	4/				
President's Budget for FY 2014		$ 3,380,000		87.0			
Programmed Balance to Complete after FY 2014		$ 2,259,000	7/				
Un-programmed Balance to Complete after FY 2014		$ 0					

1/ $441,000 reprogrammed to the project.
2/ $0 rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $0 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.
8/ PCT CMPL is for DMDF 3-D only. The FY 2013 justification sheet included the channels.
9/ Total Estimated Project Cost is for DMDF work only. The FY 2013 justification sheet included the cost of the channels.

PHYSICAL DATA: The Tampa Harbor project provides 67 miles of navigation channels ranging in depth from 30 feet to 45 feet in the entrance channel. DMMA 2-D was raised to 29 feet (NGVD 1929). DMMA 3-D was raised from 19 feet to 23 feet (NGVD 1929) by the project sponsor in 2005. FY 2013 funding will be used to raise DMMA 3-D from 23.0 feet to 33.0 feet (NGVD 1929). FY 2014 funding will be used to raise DMMA 3-D from 33.0 feet to 37.0 feet (NGVD 1929). The design height of DMMA 3-D is 40.0 feet (NGVD 1929).

JUSTIFICATION: Tampa Harbor is a high use harbor and among the nation's leading exporters of phosphate rock and chemicals (fertilizers). Major import commodities are chemicals (ammonia) and raw materials (limestone). Annual tonnage handled by the Port is over 44,174,000 tons per year for the past 10 years. Disposal Area 3-D is located on land owned by the Tampa Port Authority and is available. As of the date of this justification sheet, there is approximately 1,700,000 CY remaining disposal capacity in DMMA 3-D. Based on an estimated required disposal capacity need of 500,000 CY per year, DMMA 3-D disposal capacity will become critical during FY 2016. The only other dredge material disposal facility in the vicinity is DMMA 2-D and it is designated solely for maintenance material from non-Federal channels and is not available for disposal of material from the authorized Federal navigation channel. Based on these conditions and to meet the need for Federal operations and maintenance disposal capacity, construction of DMMA 3-D must be initiated with available funding during FY 2013. It has been determined that the most efficient procurement strategy for the DMMA 3-D is a construction contract that consists of a base and options. This acquisition strategy anticipates a duration of up to twenty four months to physically complete construction of DMMA 3-D.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate DMDF 3-D Construction dike raising from 23.0 feet to 33.0 feet (NGVD 1929)	$ 9,352,000
Planning, Engineering and Design for DMDF 3-D	761,000
Construction Management	1,573,000
Total	$ 11,686,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue DMDF 3-D Construction dike raising from 33.0’ to 37.0’ (NGVD 1929)	$ 2,705,000
Engineering During Construction	220,000
Construction Management	455,000
Total	$ 3,380,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended by the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way	$ 10,000	0
Pay 25 percent of the costs allocated to general navigation facilities during construction	5,660,000	0
Participate in Project Coordination Team, conduct audits of non-Federal costs, and perform investigations of hazardous substances	105,000	0
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as reduced by a credit allowed for the value of lands, easements, rights of way, and relocations provided for commercial navigation	2,300,000	0
Total Non-Federal Costs	$ 8,075,000	0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and, for general navigation, reimburse its share of construction costs within a period of 30 years following completion of construction.

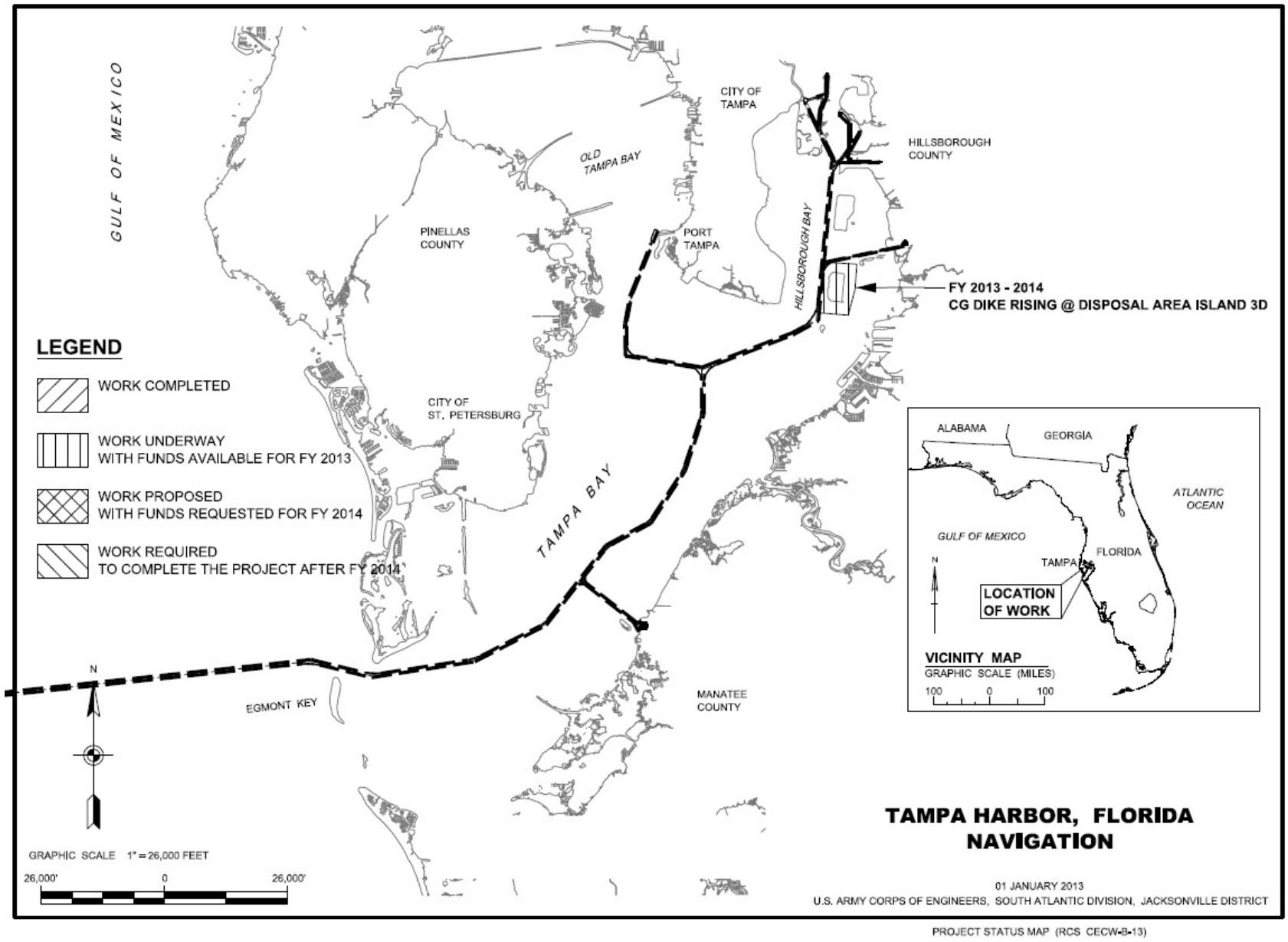
STATUS OF LOCAL COOPERATION: The Tampa Port Authority strongly supports this project. Letter of intent signed January 25, 2012. The PPA is scheduled for execution in May 2013. The source of sponsor funds is from local tax authority general revenues.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of $17,325,000 is an increase of $3,277,000 from the latest estimate ($14, 048,000) last presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Authorized Modifications as described in the 2012 DMMP Update	$ 3,000,000
Price Escalation on Construction Features	177,000
Schedule Changes	100,000
Total	$ 3,277,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Dredged Material Management Plan (DMMP) was approved in April 2002 and an update was approved in April 2012. An Environmental Assessment was submitted along with the DMMP update. The Finding of No Significant Impact (FONSI) was signed in October 2011.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 2011. The sponsor raised DMMA 3-D from 19' to 23' (NGVD 1929) in 2005. The DMMP update dated 2012 supports a total dike raise of 21 feet for DMMA 3-D (from 19 feet to 40 feet NGVD 1929). Schedule Changes in the amount of $100,000 and the FY 2013 unobligated carry-in is attributable to the delayed completion of the Integral Determination Report and the execution of the Project Partnership Agreement (PPA). This results in the base contract award being delayed from FY 2012 to FY 2013.



PROJECT STATUS MAP (RCS CECW-B-13)

Georgia

APPROPRIATION TITLE: Construction – Channels and Harbors (Environmental Restoration)

PROJECT: Lower Savannah River Basin, Georgia and South Carolina (Continuing)

LOCATION: The project is located on the Savannah River between river mile 40.9 and river mile 42.0, approximately 20 river miles above the city of Savannah, Georgia. The project area itself is located within Effingham County, Georgia and Jasper County, South Carolina. A portion of the project is within the US Fish and Wildlife Service's Savannah National Wildlife Refuge.

DESCRIPTION: The project includes a large partial diversion structure at Savannah River Cut Number 3, a plug in Bend Number 3 below the mouth of Bear Creek and the realignment and restoration of the mouths of Bear and Mill Creek's to provide improved flows into both creeks. Five years of post construction monitoring is required per the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI).

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT - REMAINING COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits have not been quantified in monetary terms.

TOTAL BENEFIT - COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits have not been quantified in monetary terms.

INITIAL BENEFIT - COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits have not been quantified in monetary terms.

BASIS OF BENEFIT - COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits have not been quantified in monetary terms.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$3,258,000			Cuts and Plugs	100	Sep 2002
Estimated Non-Federal Cost		$1,086,000			Creek Realignments	100	Sep 2002
Cash Contributions	$1,075,000				Monitoring	20	TBD
Other Costs	$11,000						
					Entire Project	73	TBD
Total Estimated Project Cost		$4,344,000					
Allocations to 30 September 2010		$2,704,000					
Allocation for FY 2011		$50,000					
Allocation for FY 2012		$86,000					
Conference Allowance for FY 2013		$30,000	5/				
Allocations through FY 2013		$2,870,000	1/ 2/ 3/ 6/	88.1			
Estimated Carry-in Funds		$0	4/				
President's Budget for FY 2014		$50,000		89.6			
Programmed Balance to Complete after FY 2014		$338,000	7/				
Unprogrammed Balance to Complete after FY 2014		$0					

1/ $352,000 reprogrammed to the project.
2/ ($4,000) rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $374,250 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The Lower Savannah River Basin environmental restoration project consists of the following features: Diversion Structure at Cut 3; Bear Creek Plug; and, Bear and Mill Creek Realignment.

JUSTIFICATION: The Rivers and Harbor Act of 1950 authorized a 9-foot Federal navigation project extending from Augusta, Georgia to the upper limit of Savannah Harbor in Savannah, Georgia. As a method to improve navigation on the river, cuts were installed in the 1960's and 1970's. These cuts straightened and shortened the river course and, as a result, channeled flow away from the original watercourse. Depletion of natural river flows through the cutoff bends resulted in rapid siltation and loss of flow to creeks originating at the bends and their surrounding wetland areas. The authorized project restored the natural flow regime in creeks and wetland areas while simultaneously restoring the environment and wildlife habitat to their pre-navigation conditions. Environmental benefits consist of fish habitat and bottomland hardwoods. In addition, improvements to the environment will directly benefit at least nine species of plants and animals found on the Federal list of threatened and endangered species, including the shortnose sturgeon, peregrine falcon, bald eagle, and wood stork. This project restores 4,700 acres of bottomland habitat. The projects expected benefits are 1,000 habitat units annually and 1,900 bottomland functional values. No significant factors affecting the cost have been identified.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate year 2 of Post Construction Monitoring	$30,000
Total	$30,000

FISCAL YEAR 2014: The budget amount of $50,000 plus carry-in funds of $0 will be applied as follows:

Complete year 2 and initiate year 3 of Post Construction Monitoring	$50,000
Total	$50,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 as amended, and in the PCA executed on 24 July 2000, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged or excavated material disposal areas.	$11,000	0
Pay 25% of the costs allocated ecosystem restoration to bring the total non-Federal share of ecosystem costs to 35%, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of ecosystem restoration features.	$1,075,000	0
Total Non-Federal Costs	$1,086,000	0

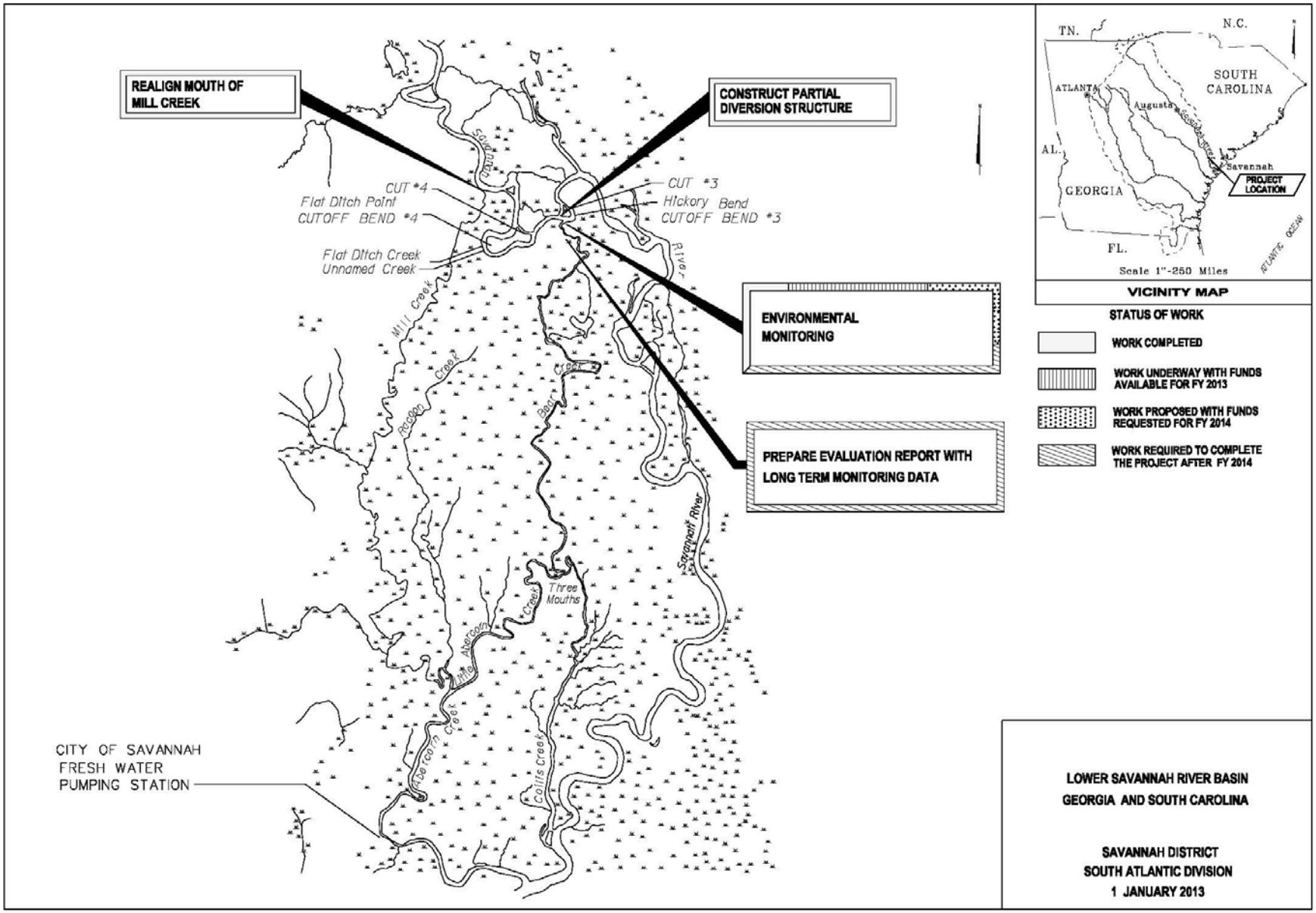
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The City of Savannah, Georgia is the non-Federal project sponsor. The Project Cooperation Agreement was executed on 24 July 2000. The project sponsor verbally indicated continued support on 9 April 2012.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $3,258,000 is the same as the latest estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) was prepared for the project and a Finding of No Significant Impact (FONSI) was signed on 22 March 1996.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1996. Funds to initiate construction were appropriated in FY 2000. The construction was physically complete in FY 2002. The EA/FONSI, project authorization and permits require five years of post construction monitoring be conducted and an environmental close out report be prepared. Funding has been provided to complete one year of the five year required environmental monitoring.


REALIGN MOUTH OF MILL CREEK
CONSTRUCT PARTIAL DIVERSION STRUCTURE
ENVIRONMENTAL MONITORING
PREPARE EVALUATION REPORT WITH LONG TERM MONITORING DATA
CUT #4
Flat Ditch Point CUTOFF BEND #4
Flat Ditch Creek
Unnamed Creek
CUT #3
Hickory Bend CUTOFF BEND #3
Savannah River
Mill Creek
Raccoon Creek
Bear Creek
Three Mouths
Abercorn Creek
Colitis Creek
Savannah River
CITY OF SAVANNAH FRESH WATER PUMPING STATION
TN.
N.C.
SOUTH CAROLINA
ATLANTA
Augusta
AL.
Savannah
PROJECT LOCATION
GEORGIA
FL.
ATLANTIC OCEAN
Scale 1"-250 Miles
VICINITY MAP
STATUS OF WORK
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR FY 2013
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014
LOWER SAVANNAH RIVER BASIN
GEORGIA AND SOUTH CAROLINA
SAVANNAH DISTRICT
SOUTH ATLANTIC DIVISION
1 JANUARY 2013

APPROPRIATION TITLE: Construction - Multi Purpose Power (Hydropower)

PROJECT: Richard B. Russell Dam and Lake, Georgia and South Carolina (Continuing)

LOCATION: Richard B. Russell Dam is located on the Savannah River 275.1 miles above its mouth, 29.9 miles below Hartwell Dam, and about 37.4 miles above J. Strom Thurmond Dam (formerly Clark Hill Dam). This is approximately 16 miles southeast of Elberton, Georgia.

DESCRIPTION: The project consists of a concrete, gravity-type dam, flanked by earth embankments with a maximum height of 200 feet above the river. The total length of the dam is 5,616 feet and consists of a 1,884-foot concrete section and embankments with a total length of 3,732 feet. The gate-controlled spillway has a design capacity of 80,000 cubic feet per second. The project includes the installation of 328 megawatts of conventional power completed in January 1986 and 320 megawatts of reversible pumped storage power for a total available capacity of 648 megawatts completed in 1992. The installation of new main circuit breakers and static frequency converter system (MCB/SFC) will be completed in 2013 yielding reliable pump back operations and full hydropower generation capability; an especially important feature during periods of drought. The project will be considered complete after the 5 years of required environmental monitoring when full pump back operations is completed.

AUTHORIZATION: Flood Control Act of 1966, modified by Section 182 of the Water Resources Development Act of 1976 (Public Law 94-587) and Section 601 of the Water Resources Development Act of 1986 (Public Law 99-662).

REMAINING BENEFIT - REMAINING COST RATIO: N/A; funding is an environmental judicial requirement

TOTAL BENEFIT - COST RATIO: N/A; funding is an environmental judicial requirement

INITIAL BENEFIT - COST RATIO: N/A; funding is an environmental judicial requirement

BASIS OF BENEFIT - COST RATIO: N/A; funding is an environmental judicial requirement

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)			$649,086,000		Dam & Spillway	100	1984
					Power Generation		
Future Non-Federal Reimbursement		$590,583,000			Conventional (4)	100	1985
					Pump Storage (4)	100	2002
Estimated Federal Cost (Ultimate)		$56,603,000			MCB/SFC (4)	10	2013
					Monitoring		TBD
Estimated Non-Federal Cost		$592,483,000			Pre-construction	100	2012
Cash Contributions	$1,900,000				Post-construction	0	TBD
Other Costs	$0				Entire Project	98.8	TBD
Reimbursements	$590,583,000						
Power	$590,583,000						
Total Estimated Project Cost			$649,086,000				
Allocations to 30 September 2010		$637,642,000					
Allocation for FY 2011		$943,000					
Allocation for FY 2012		$3,132,000					
Conference Allowance for FY 2013		$60,000	5/				
Allocations through FY 2013		$641,777,000	1/ 2/ 3/ 6/	98.9			
Estimated Carry-In Funds		$0	4/				
President's Budget for FY 2014		$880,000		99.0			
Programmed Balance to Complete after FY 2014		$6,429,000	7/				
Unprogrammed Balance to Complete after FY 2014		$0					

1/ $1,053,000 reprogrammed to the project.
2/ ($103,000) rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of$ 0 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The Richard B. Russell Lake and Dam project consists of the following features:

Dam – Concrete Gravity; 200 feet high, 5,616 feet long

Spillway – Gate Controlled; 80,000 cubic feet per second

Power Generation
Conventional (4), 82 mega watts each
Pump Storage (4), 80 mega watts each

Reservoir Capacity (acre-feet)
Flood Control - 140,000
Power - 126,800
Dead Storage - 899,400

JUSTIFICATION: The 648 megawatts installation, including pumped storage, will help meet the increased power requirements and rapid growth demands in this region. The output can be fully utilized immediately upon project completion in Federal Energy Regulatory Commission (FERC) supply areas 21, 22, and 23. This includes all of South Carolina, most of North Carolina, Georgia, Alabama, and parts of Mississippi and Florida. The FERC has repeatedly stated the need for this power source. This project is an integral unit of the plan for development of the Savannah River Basin for flood control, navigation, power, and other purposes. The recreational facilities will serve an area surrounding the three-lake complex of J. Strom Thurmond (JST), Hartwell, and Richard B. Russell lakes. Average annual benefits are as follows:

Annual Benefits	Amount($)
Power	$52,995,000
Flood Control	177,000
Recreation	3,597,000
Fish and Wildlife	71,000
Area Redevelopment	4,212,000
Total	$61,052,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate year 1 of the required Post Construction Environmental Monitoring	$741,000
Complete installation of the MCB/SFC System	$28,000
Total	$769,000

FISCAL YEAR 2014: The budget amount of $880,000 plus carry-in funds of $0 will be used as follows:

Complete year 1 and initiate year 2 of the required Post Construction Environmental Monitoring	$880,000
Total	$880,000

NON-FEDERAL COST: In accordance with Public Law 89-72, agreements for recreation development with the States of Georgia and South Carolina have been executed and were approved by the Secretary of the Army on 20 May 1974. The costs allocable to power are reimbursable, and have been reviewed and adjusted, based on construction costs as the project components become operational.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay all capital costs allocated to hydropower and bear annual costs of operation, maintenance, repair, rehabilitation and replacement of hydropower features.	$590,583,000	$3,557,000
Pay (repayment not to exceed 50 years with interest) or contribute in kind, one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation or replacement of recreation features.	$1,900,000	$249,000
Total Non-Federal Costs	$592,483,000	$3,806,000

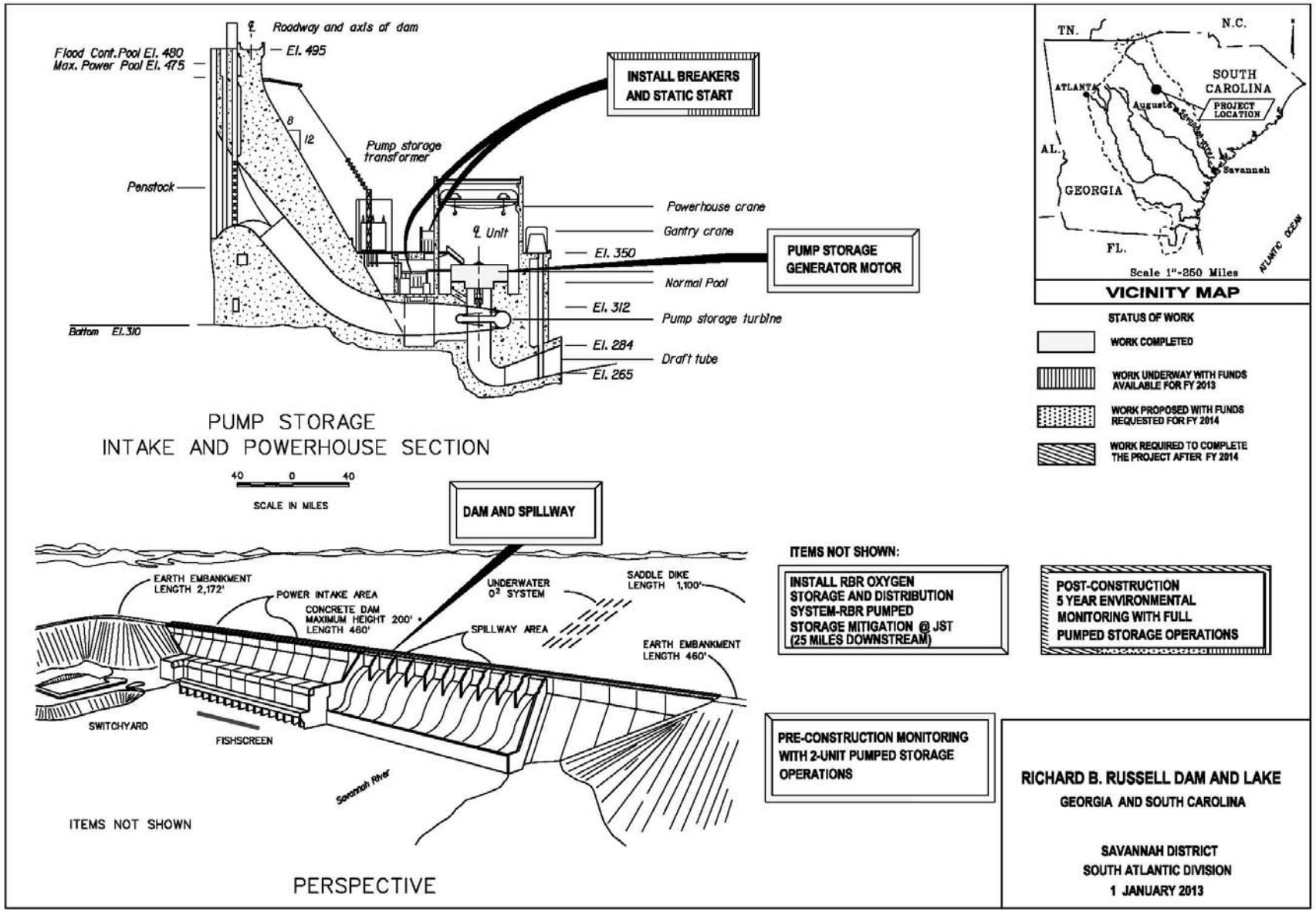
STATUS OF LOCAL COOPERATION: The State of Georgia began payments for recreation reimbursements in May 1985. The State of South Carolina began payments in August 1985. Responsibility for repayment of power costs rests with the Southeastern Power Administration (SEPA) pursuant to Federal Laws.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $649,086,000 is the same as the latest estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) on conventional installation was submitted to the Council on Environmental Quality (CEQ) on 31 May 1974. A supplement on water quality to the final EIS was filed with CEQ in May 1976. The final EIS on pumped storage was filed with the Environmental Protection Agency (EPA) in October 1979. The supplement on fish and wildlife mitigation to the final EIS was filed with the EPA in December 1981. A supplement to the final EIS on pumped storage was filed in August 1991. The final National Environmental Policy Act (NEPA) document is an Environmental Assessment (EA) which requires 7 years of environmental testing. It embodies those technical items that the Corps of Engineers (COE) and South Carolina have reached agreement on, relating to operational measures, construction of an oxygenation (O2) system to improve fish habitat and continued environmental monitoring of a commercial operation. The EA for Pumped Storage was completed in FY 1999 and the Finding of No Significant Impact was signed in August 1999.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1968. Funds to initiate land acquisition were appropriated in FY 1971 and allocated in FY 1972. Initial construction funds were appropriated in FY 1975. Pumped Storage was declared commercially available on 1 September 2002 with a favorable decision from U.S. District Court granted 03 May 2002. In accordance with the NEPA Decision previously signed in August 1999, the District agreed to construct an O2 system in JST Lake to mitigate the environmental impacts, from the potential summer time temperature rise, to the striped bass habitat in the tail water regime below Richard B. Russell Dam. This mitigation feature has to be in place before there can be full use of the 4 Pump-Back units year round. The District agreed to limit pumping with two units from June to September prior to the completion of the O2 System and full pumped storage operations. The substantial completion of the O2 system allowed Richard B. Russell to generate power using three pump units during the summer of 2011. This saved SEPA approximately $2,000,000 per month. With the completion of the O2 system in April 2012 and the installation of the MCB/SFC System, scheduled for the spring of 2013, SEPA will gain full benefits from the power generated at Richard B. Russell Power Plant using full pumped storage capability. As of the date of this J-sheet, the FY 2013 funding requirement reflects a refined scope of work which has been coordinated and finalized for the Post Construction Environmental Monitoring.

The 1999 NEPA document also requires that the COE continue environmental monitoring for seven years. Two years of monitoring were completed with 2 unit operations before the installation of the O2 System. Five years of environmental monitoring is required to be completed with full commercial pumped storage operations to commence in 2013.


℄ Roadway and axis of dam
Flood Cont. Pool El. 480
Max. Power Pool El. 475
El. 495
8
12
Pump storage transformer
Penstock
INSTALL BREAKERS AND STATIC START
Powerhouse crane
Gantry crane
℄ Unit
El. 350
PUMP STORAGE GENERATOR MOTOR
Normal Pool
El. 312
Pump storage turbine
Bottom El. 310
El. 284
Draft tube
El. 265
PUMP STORAGE
INTAKE AND POWERHOUSE SECTION
40 0 40
SCALE IN MILES
DAM AND SPILLWAY
EARTH EMBANKMENT LENGTH 2,172'
POWER INTAKE AREA
CONCRETE DAM MAXIMUM HEIGHT 200' LENGTH 460'
UNDERWATER O² SYSTEM
SADDLE DIKE LENGTH 1,100'
SPILLWAY AREA
EARTH EMBANKMENT LENGTH 460'
SWITCHYARD
FISHSCREEN
Savannah River
ITEMS NOT SHOWN
PERSPECTIVE
TN.
N.C.
SOUTH CAROLINA
ATLANTA
Augusta
PROJECT LOCATION
AL.
Savannah
GEORGIA
FL.
ATLANTIC OCEAN
Scale 1"=250 Miles
VICINITY MAP
STATUS OF WORK
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR FY 2013
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014
ITEMS NOT SHOWN:
INSTALL RBR OXYGEN STORAGE AND DISTRIBUTION SYSTEM-RBR PUMPED STORAGE MITIGATION @ JST (25 MILES DOWNSTREAM)
POST-CONSTRUCTION 5 YEAR ENVIRONMENTAL MONITORING WITH FULL PUMPED STORAGE OPERATIONS
PRE-CONSTRUCTION MONITORING WITH 2-UNIT PUMPED STORAGE OPERATIONS
RICHARD B. RUSSELL DAM AND LAKE
GEORGIA AND SOUTH CAROLINA
SAVANNAH DISTRICT
SOUTH ATLANTIC DIVISION
1 JANUARY 2013

APPROPRIATION TITLE: Construction – Channels and Harbors (Navigation)

PROJECT: Savannah Harbor Disposal Areas, Georgia and South Carolina (Continuing)

LOCATION: The Savannah Harbor Dredge Material Containment Areas (DMCA's) are located in Jasper County, South Carolina adjacent to the Savannah Harbor Federal Navigation Project. The DMCA's are integral to the continued operation and maintenance of the 42 foot Savannah Harbor Federal Navigation Project which includes the lower 21.3 miles of the Savannah River, the principal boundary between the states of Georgia and South Carolina.

DESCRIPTION: The DMCA project provides for incrementally raising each of the six DMCA's at a cycle of one disposal area per year to increase disposal capacity as required to support the Savannah Harbor 42 foot Federal Navigation Project authorized in WRDA 1992. The increase in DMCA capacity is cost-shared with the State of Georgia under the authority provided in the Water Resources Development Act of 1996. The Project Cooperation Agreement was executed with the Georgia Department of Transportation in January 2005 for project costs through FY 2026.

AUTHORIZATION: The DMCA's are included as a part of the Savannah Harbor Federal Navigation Project authorized in the Water Resources Development Act of 1992 (P.L. 102-580). Section 201 of the Water Resources Development Act of 1996 (P.L.104-303) addressed cost sharing for dredged material containment areas.

REMAINING BENEFIT-REMAINING COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized 42 foot deep navigation project.

TOTAL BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized 42 foot deep navigation project.

INITIAL BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized 42 foot deep navigation project.

BASIS OF BENEFIT-COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized 42 foot deep navigation project.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$93,434,000			2A Dike Raising	100	July 1999
Estimated Non-Federal Cost		$50,310,000			13B Dike Raising	100	April 2008
Cash Contributions	$50,310,000				14B Dike Raising	66	TBD
Other Costs	0				14A Dike Raising	66	TBD
					12B Dike Raising	100	April 2011
Total Estimated Project Cost		$143,744,000			Jones Oyster bed	50	TBD
					12A Dike Raising	50	TBD
Allocations to 30 September 2010		$15,744,000			13A Dike Raising	33	TBD
Allocation for FY 2011		$5,300,000					
Allocation for FY 2012		$4,939,000			Entire Project	71	TBD
Conference Allowance for FY 2013		$8,817,000	5/				
Allocations through FY 2013		$34,800,000	1/ 2/ 3/ 6/	37.2			
Estimated Carry-In Funds		$0	4/				
President's Budget for FY 2014		$8,000,000		45.8			
Programmed Balance to Complete after FY 2014		$50,634,000	7/				
Unprogrammed Balance to Complete after FY 2014		$0					

1/ ($3,316,000) reprogrammed from the project.
2/ $0 rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $0 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The Savannah Harbor Disposal Area dikes will be raised to the following elevations in accordance with the 20 year Dredge Material Disposal Plan (DMMP), dated April 2003 and approved by the South Atlantic Division in September 2003.

12A Dike Raising to 74 feet Mean Lower Low Water (MLLW); 13A Dike Raising to 68 feet MLLW; 13B Dike Raising to 45 feet MLLW
14A Dike Raising to 29 feet MLLW; 14B Dike Raising to 45 Feet MLLW; Jones Oysterbed Dike Raising to 41 Feet MLLW

JUSTIFICATION: The Savannah Harbor has 61 piers and wharves that serve existing waterborne commerce. The Georgia Ports Authority is currently the as the 4th largest container port in the United States (U.S.) and the fastest growing container port in the Nation and the second largest container port on the U.S. East Coast, with over 2.74 million Twenty-foot Equivalent Units (TEUs) passing through the GPA Garden City port facility annually. The Long Term Management Strategy (LTMS) for the Savannah Harbor, dated August 1996, described the least cost plan to continue maintenance of the existing project. The sequential raising of dikes in each of the DMCA is critical to the ability of the U.S. Army Corps of Engineers to maintain the 42 foot Savannah Harbor Federal Navigation Project. The LTMS, supplemented by the annual DMMP, forecasts the dredge disposal requirements for a 20 year planning horizon. Major imports include retail consumer goods, machinery, appliances and electronics, major exports include kaolin clay, chemicals, fabrics, resins and rubber, forest and agricultural products and manufactured equipment with a 10 year average commercial tonnage of 29,458,000.

As of the date of this justification sheet, there is approximately 30,500,000 cubic yards of remaining disposal capacity in the six Savannah Harbor DMCA. Based on an estimated required disposal capacity need of up to 7,000,000 cubic yards per year, disposal capacity will become critical as early as through FY 2015 and meet environmental requirements. The six DMCAs are paired for utilization of disposal of operations and maintenance material as follows: DMCA 13A and DMCA 12A for Stations 103+000 to 50+000; DMCA 13B and DMCA 14A for material from Stations 50+000 to 30+000; and DMCA 14B and Jones-Oysterbed from Stations 30+000 to 0+000.

As of the date of this justification sheet, the following schedule of usage is anticipated: FY 2013 disposal actions are planned to occur in DMCAs 13A and 13B with ditching, drying and additional capacity being constructed in DMCAs 12A, 14A, 14B and Jones Oysterbed; FY 2014 disposal actions are planned to occur in DMCAs 12A, 14A and 14B with ditching and drying in DMCA 13A and additional capacity being constructed Jones Oysterbed; and, FY 2015 disposal actions are planned to occur in DMCAs 12A, 14A and Jones Oysterbed with ditching, drying and additional capacity being constructed in DMCAs 13A, 13B, and 14B. Based on these conditions and to meet the need for Federal operations and maintenance disposal capacity, it has been determined that the most efficient procurement strategy for the DMCAs is a construction contract that consists of a base and options. This acquisition strategy anticipates a duration of twelve to twenty four months to physically complete any single DMCA construction activity.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate and complete DMCA 14B plans and specifications to 39 feet MLLW	$ 250,000
Initiate and complete the plans and specifications for DMCA 14A to 23 feet MLLW	$ 250,000
Initiate and complete the plans and specifications for Jones Oysterbed Island Back Dike to 29 feet MLLW	$ 250,000
Initiate DMCA 14B contract dike raising to 39 feet MLLW	$3,500,000
Initiate and complete DMCA 14A Back Dike contract to 23 feet MLLW	$2,570,000
Initiate Jones Oysterbed Island Back Dike contract raising to 29 feet MLLW	$4,100,000
Construction Management on DMCAs 12A, 14A, 14B and Jones Oysterbed	$ 817,000
Total	$11,737,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Engineering and Design for Jones Oysterbed Dike Front Dike Raising to 29 feet MLLW and Weir Installation	$500,000
Initiate Construction on Jones Oysterbed Dike Front Dike Raising contract to 29 feet MLLW and Weir Installation	$6,700,000
Construction Management for Jones Oyster Bed Front Dike Raising to 29 feet MLLW and Weir Installation	$800,000
Total	$8,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing requirements of the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and excavated or dredged material disposal areas.	0	0
Pay 35 percent of the costs allocated to navigation during construction.	$50,310,000	0
Total Non-Federal Costs	$50,310,000	0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

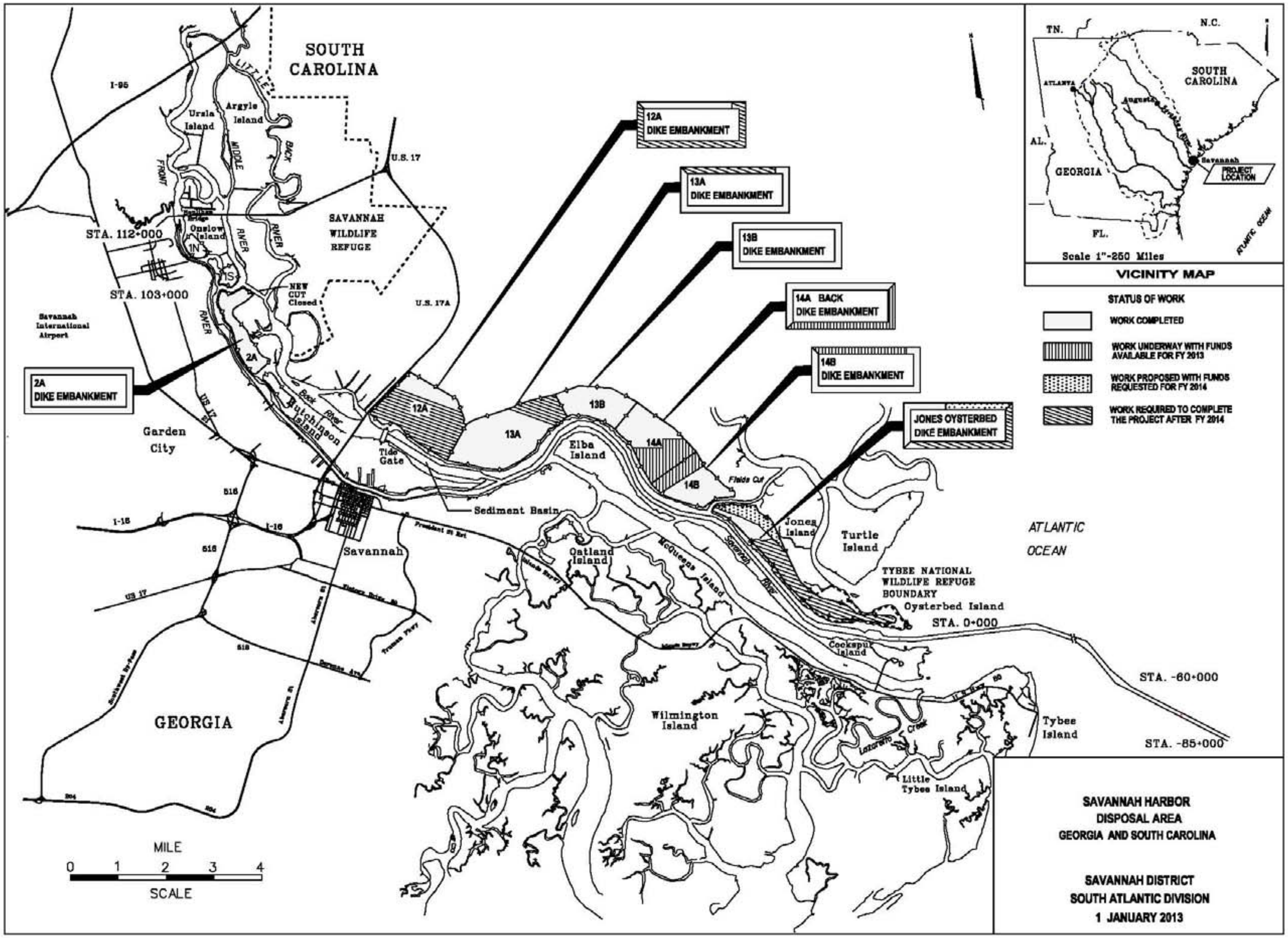
STATUS OF LOCAL COOPERATION: The Georgia Department of Transportation (GDOT) is the non-Federal project sponsor. A Project Cooperation Agreement (PCA) was executed with the GDOT in January 2005 under the authority Water Resources Development Act of 1996. An amendment is being prepared to account for the total project cost increase of $83,744,000 with a non-Federal share of $29,310,000. The new project cost and sponsor share has been coordinated with and agreed upon by GDOT, the local sponsor.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $93,434,000 is an increase of $54,434,000 from the latest estimate ($39,000,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Authorized Modifications	$ 54,434,000
Total	$54,434,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Savannah Harbor Long Term Management Strategy (LTMS) was completed in 1996. The Record of Decision (ROD) was signed February 3, 1997. A revised Dredge Material Management Plan approved in September 2003 recommends no changes to the LTMS Environmental recommendations.

OTHER INFORMATION: Initial Construction funds were received in FY 2005. The Dredge Material Disposal Plan (DMMP) for the Savannah Harbor 42 foot Federal Navigation Project, approved by SAD in December 2003, describes the least cost plan to continue maintenance of the existing project. The timely and sequential raising of dikes of the DMCA(s) is critical to the ability of the U.S. Army Corps of Engineers to maintain the existing Savannah Harbor Federal Navigation project for required O&M capacity. The total project cost increase is due to recent revisions to the disposal area rotational methodology to better accommodate channel maintenance operations and to comply with mitigation requirements. These actions necessitated the need for an additional 11 contracts to attain the same useable capacity as proposed in the 2003 DMMP. In addition, of the 19 total contracts, four will reflect higher costs because of incorporation of crucial erosion protection into the dike templates that is needed to protect the Federal investment. Also, the current DMMP did not account for increased costs associated with regaining lost capacity resulting from settlement and consolidation of the newly constructed dike templates in DMCAs 12A, 14A, 13B. Due to award of FY 2012 contracts for less than anticipated, initiation of plans and specifications on 14B dike raising were advanced into FY 2012 and reduced the funding need for this sub-element in FY 2013. The FY 2013 funds will be used to award an increased scope for the base bid on Jones Oysterbed Back Dike. The FY 2013 funding for the 14A Dike Raise has been adjusted to reflect the actual contract award which occurred in FY 2013 prior to date this j-sheet was prepared.


SOUTH CAROLINA
GEORGIA
12A DIKE EMBANKMENT
13A DIKE EMBANKMENT
13B DIKE EMBANKMENT
14A BACK DIKE EMBANKMENT
14B DIKE EMBANKMENT
JONES OYSTERBED DIKE EMBANKMENT
2A DIKE EMBANKMENT
SAVANNAH WILDLIFE REFUGE
STA. 112+000
STA. 103+000
Savannah International Airport
Garden City
Savannah
Sediment Basin
Tide Gate
Elba Island
Oatland Island
Wilmington Island
Jones Island
Turtle Island
TYBEE NATIONAL WILDLIFE REFUGE BOUNDARY
Oysterbed Island
STA. 0+000
Cockspur Island
STA. -60+000
STA. -85+000
Tybee Island
Little Tybee Island
ATLANTIC OCEAN
MILE
0 1 2 3 4
SCALE
VICINITY MAP
Scale 1"=250 Miles
STATUS OF WORK
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR FY 2013
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014
SAVANNAH HARBOR
DISPOSAL AREA
GEORGIA AND SOUTH CAROLINA
SAVANNAH DISTRICT
SOUTH ATLANTIC DIVISION
1 JANUARY 2013

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: Tybee Island, Georgia - (Continuing)

LOCATION: The project is located in Chatham County, Georgia. Tybee Island is a 3.5-mile long barrier island located 18 miles east of the City of Savannah at the mouth of the Savannah River on the Atlantic Ocean. The mostly developed island is bordered on the north by the South Channel of the Savannah River, on the east by the Atlantic Ocean, and on the south and west by the Back River and other tidal creeks. Tybee Island has an average width of 0.5 miles and the ground elevation varies from 10 to 18 feet above mean low water (MLW) and slopes westward to the salt marshes.

DESCRIPTION: The plan of improvement for Tybee Island consists of nourishing 13,200 linear feet of beach between two terminal groins; construction of a groin field along 1,100 linear feet of shoreline from the southern terminal groin around the South Tip to the mouth of Tybee Creek, including planned periodic nourishment every seven years; and construction of a groin field and nourishment of 1,800 linear feet of the eastern bank of Tybee Creek to the city fishing pier. The authorized improvement plan also includes the remaining shoreline from the fishing pier to the mouth of Horse Pen Creek which is relatively stable.

AUTHORIZATION: Project was authorized by Section 201 of Flood Control Act of 1965 (Public Law 89-298) and U.S. Senate Committee Resolution of 22 June1971 authorized the project as contained in House Document 92-105. The project authorization was subsequently modified by: Section 156 of Water Resources Development Act (WRDA) 1976 (Public Law 94-587); Section 934 WRDA 1986 (Public Law 99-662) and Section 301(b)(4) and Section 506 of WRDA 1996 (Public Law 104-303).

REMAINING BENEFIT-REMAINING COST RATIO: 4.6 to 1 at 7 percent (2013 to 2024)

TOTAL BENEFIT-COST RATIO: 4.6 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 1.7 to 1 at 4.875 percent (FY 1970)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Tybee Island, Georgia Beach Erosion Control and Hurricane Protection Report, 1970 as revised in the Limited Re-evaluation Report (LRR) dated December 2005 and approved in April 2006. The benefits of $8,615,000 remain unchanged. However, the RBRC and the total BCR values reflect the updated cost estimate for the 9-year equivalent renourishment action needed to fulfill the 50-year project life. The total cost is annualized over the remaining 12 year period of the life. The RBRC and BCR for the 7 percent discount rate are 4.6 to 1. The FY 2013 J-Sheet erroneously reflected an RBRC and BCR for the current discount rate of 5.6 to 1 instead of values calculated at 7 percent discount rate.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			$30,073,000		Initial Construction	100	May 1976
Initial Construction		$1,942,000			Periodic Nourishment	67	TBD
Periodic Nourishment		$28,131,000					
					Entire Project	71	TBD
Estimated Non-Federal Cost			$19,471,000				
Initial Construction		$2,064,000					
Cash Contributions	$1,989,000						
Other Costs	$75,000						
Periodic Nourishment		$17,407,000					
Cash Contributions	$17,407,000						
Other Costs	0						
Total Estimated Project Cost			$49,544,000				
Initial Construction		$4,006,000					
Periodic Nourishment		$45,538,000					
Allocations to 30 September 2010		$16,146,000					
Allocation for FY 2011		($122,000)					
Allocation for FY 2012		$42,000					
Conference Allowance for FY 2013		$150,000	5/				
Allocations through FY2013		$16,216,000	1/ 2/ 3/ 6/	53.9			
Estimated Carry-In Funds		$0	4/				
President's Budget for FY 2014		$300,000		55.0			
Programmed Balance to Complete after FY 2014		$13,557,000	7/				
Unprogrammed Balance to Complete after FY 2014		$0					

1/ $923,200 reprogrammed to the project.
2/ ($124,000) rescinded from the project.
3/ $7,500 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of 0 are included in this amount.
7/ For programmed work only; remaining work is un-programmed, pending a decision to construct these features.

PHYSICAL DATA: The Tybee Island, Georgia Flood Risk Management project consists of the following features:

Groins
Groin Field 1 – 1,100 linear feet
Groin Field 2 – 1,800 linear feet

Beach Replenishment
Initial Beach Fill - 2,262,000 cubic yards (cy)
Periodic Nourishment – Six at 1,300,000 cy

JUSTIFICATION: The project area currently has an estimated erosion rate of 78,000 cy per year. However, hot spots that occur primarily at Second Street lose over 125,000 cy per year. The Tybee Island shore protection extends for 10,675 feet of shoreline, which directly benefits 7 businesses, 14 Condos, 42 streets/alleyways, and 117 residences, several of which are multifamily units. The initial nourishment was completed in 1976 with the placement of 2,262,100 cy on along front beach. The initial nourishment of the Back River was completed in 2000 with the placement of 94,178 cy of sand. Seven years of renourishment from the commencement of the initial construction is authorized for a 50 year period through the last year of renourishment in 2026. Four cycles have been completed to date in 1987 (1,357,000 cy), 1993 (918,000 cy), 2000 (1,386,392 cy), 2008 (1,227,148 cy).The project also results in economic benefits for improved recreation. The average annual benefits are:

Annual Benefits	Amount ($)
Storm Damage Reduction	852,000
Recreation	7,763,000
Total	8,615,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate and complete the Limited Re-evaluation Report	$176,000
Total	$176,000

FISCAL YEAR 2014: The budget amount of $300,000 plus carry-in funds will be applied as follows:

Initiate and complete the Engineering & Design for the last planned periodic renourishment requiring Federal Participation	$300,000
Total	$300,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in WRDA 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way.	75,000	0
Pay 39.3 percent of all costs associated with the initial construction and periodic nourishment costs.	19,396,000	0
Total Non-Federal Costs	19,471,000	0

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

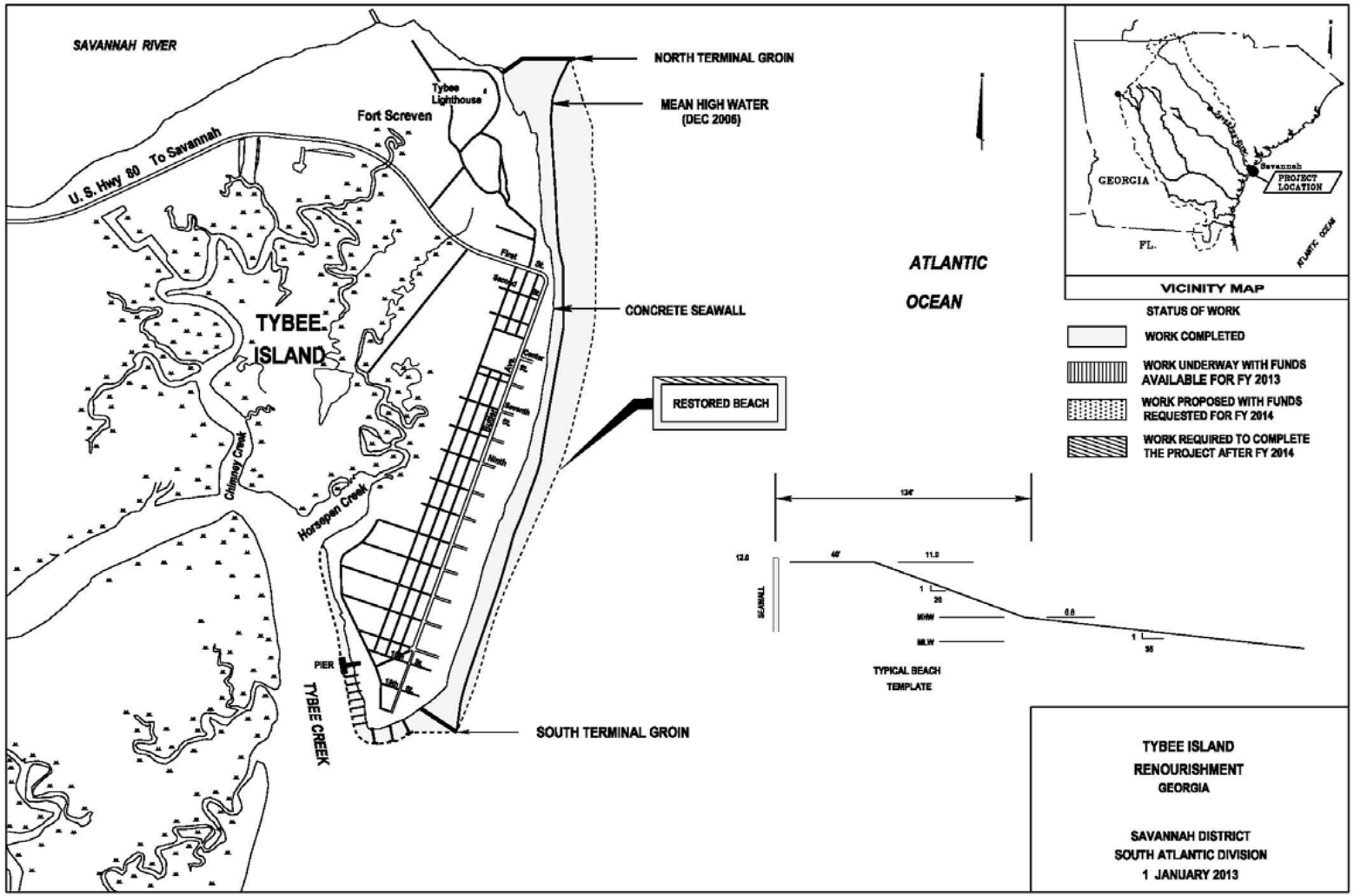
STATUS OF LOCAL COOPERATION: The non-Federal sponsor receives a large percentage of its share of funding from the State of Georgia. A Local Cooperation Agreement (LCA) was executed 3 April 1974. Supplemental Agreement 1 to the LCA was signed 28 June 1985. Supplement Agreement 2 to the LCA was signed 22 December 1986. A Project Cooperation Agreement was executed on 6 May 1999. The LRR dated 12 April 2006 revised the cost share to 60.7 percent Federal and 39.3 percent Non-Federal. The sponsor has indicated their willingness to fund the non-Federal share of the 2015/2016 renourishment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $30,073,000 is an increase of $2,739,000 from the latest estimate ($27,334,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation	$2,739,000
Total	$2,739,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The latest Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI) for Tybee Island was signed by the District Engineer on 4 August 2008.

OTHER INFORMATION: Congress appropriated funding in FY 1972 for preconstruction engineering and design for the north end terminal groin. Construction General funding was provided in FY 1974 with completion of initial construction in FY 1976. The last Periodic Renourishment of Tybee Island was completed in December 2008 (FY 2009). Operation and maintenance responsibilities have been assumed by the non-Federal sponsor. In accordance with the latest LRR dated 12 April 2006, the next economic and environmental update is scheduled to be conducted in FY 2013, followed by the development of Plans and Specifications in FY 2014, for a nine year equivalent renourishment in FY 2015 to complete the 50 year life of the project in FY 2024. This will entail placement of an additional 300,000 cubic yards of beach quality material over the normal 7-year quantity. It is anticipated that the non-Federal Sponsor will be requesting a re-evaluation be performed in the near future to determine if continued federal participation in this project is justified. Forty-one of fifty years of beach renourishments have been completed.


SAVANNAH RIVER
U. S. Hwy 80 To Savannah
Tybee Lighthouse
Fort Screven
TYBEE ISLAND
Chimney Creek
Horsepen Creek
TYBEE CREEK
PIER
NORTH TERMINAL GROIN
MEAN HIGH WATER (DEC 2006)
CONCRETE SEAWALL
RESTORED BEACH
SOUTH TERMINAL GROIN
ATLANTIC OCEAN
TYPICAL BEACH TEMPLATE
SEAWALL
MHW
MLW
GEORGIA
FL.
Savannah
PROJECT LOCATION
VICINITY MAP
STATUS OF WORK
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR FY 2013
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014
TYBEE ISLAND
RENOURISHMENT
GEORGIA
SAVANNAH DISTRICT
SOUTH ATLANTIC DIVISION
1 JANUARY 2013

North Carolina

APPROPRIATION TITLE: Construction - Channel and Harbors (Navigation)

PROJECT: Wilmington Harbor 96 Act, North Carolina (Continuing)

LOCATION: The project is located at Wilmington on the southeastern coast of North Carolina in New Hanover and Brunswick Counties.

DESCRIPTION: The project consists of two separable elements, the portion for deepening of the existing project and the portion for raising the dikes on the Eagle Island dredged material disposal facility (DMDF) for maintenance of the project. Features constructed to date include deepening the ocean bar and entrance channels to the authorized depth of 44 feet; deepening the project to 42 feet up from Lower Swash Channel to and including the Between Channel; widening the existing 400-foot wide channel to 600 feet over a total length of 6.2 miles including Lower and Upper Midnight and Lower Lilliput reaches; widening five turns and bends by 100 to 200 feet providing a total average channel width of 500 to 675 feet; and widening the Fourth East Jetty Channel to 500 feet over a total length of 1.5 miles. Features yet to be completed include deepening the 32-foot channel between Castle Street and the Hilton Railroad Bridge, the 32-foot turning basin just above the mouth of the Northeast Cape Fear River on the west side, and the 25-foot channel from the Hilton Railroad Bridge to 750 feet upstream all to a depth of 38 feet; deepening the 25-foot channel from 750 feet upstream of the Hilton Railroad Bridge to the turning basin near the upstream limits of the project to 34 feet, along with widening of the channel from 200 to 250 feet; and widening the turning basin from 700 to 800 feet. Deepening features currently under construction include the anchorage basin immediately upriver from the North Carolina State Ports Authority dock from 38 feet to 42 feet and the extension of the anchorage basin northward by 300 feet. The contract was awarded in September 2012. Mitigation requirements are complete with the acquisition by fee title of 30 acres of upland areas and construction of an embayment. Acquisition of about 700 acres of existing marsh and upland areas for preservation of habitat to offset losses of wetlands and primary nursery areas has been completed. A Fish Passage at Cape Fear River Lock and Dam 1, a mitigation requirement for the deepening actions previously accomplished, was completed in November 2012. Improvement to the Eagle Island DMDF is ongoing as required by incrementally raising the dikes of three cells from the original elevation of 17 feet in 1996 to an ultimate elevation of 40 feet.

AUTHORIZATION: Public Law 104-303, 12 October 1996, Section 101 as modified to include the Eagle Island DMDF by the Public Law 105-62, 13 October 1997, and Public Law 99-662, 17 November 1986, Sections 101 and 202.

REMAINING BENEFIT- REMAINING COST RATIO: 1.9 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 7 percent

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 7-5/8 percent (FY 1998)

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation contained in the following three decision documents which were combined into the single Wilmington Harbor – 96 Act project authorization in the WRDA 1996. The feasibility report dated June 1996 at October 1995 price levels for the Cape Fear-Northeast Cape Fear River project, in the General Design Memorandum Supplement dated February 1994 at October 1993 price levels for the Wilmington Harbor-Northeast Cape Fear River project and in the feasibility report dated March 1994 at October 1992 price levels for the Wilmington Harbor Channel Widening project. The benefit to cost ratio is based on a Level 1 economic update dated July 2011.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Appropriation Requirement (CoE)			$ 364,255,000		Channels	88	TBD
					Passing Lanes	100	Jun 2006
Estimated Appropriation Requirement (OFA)			$ 2,238,000		Turns and Bends	100	Jan 2004
					Anchorage Basin	100	Jun 2006
Estimated Total Appropriation Requirement			$ 366,493,000		Turning Basin 1&2	0	TBD
					Mitigation	100	Nov 2012
Future Non-Federal Reimbursement			$ 44,705,000		Eagle Island DMDF	95	TBD
Estimated Federal Cost (Ultimate)			$ 321,788,000		Entire Project	86	TBD
Estimated Non-Federal Cost			$ 222,212,000				
Cash Contributions		$ 123,234,000					
Other Costs		$ 54,273,000					
Reimbursements	$ 44,705,000						
Navigation	$ 44,705,000						
Total Estimated Project Cost			$ 544,000,000				

SUMMARIZED FINANCIAL DATA (continued)			ACCUM PCT OF EST FED COST	STATUS (1 January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Allocations to 30 September 2010	$ 259,403,000					
Allocation for FY 2011	$ 14,612,000					
Allocation for FY 2012	$ 22,117,000					
Conference Allowance for FY 2013	$ 0	5/				
Allocations through FY 2013	$296,132,000	1/ 2/ 3/ 6/	81.3			
Estimated Unobligated Carry-In Funds	$ 7,000,000	4/				
Budget Amount for FY 2014	$6,800,000		83.3			
Programmed Balance to Complete after FY 2014	$ 61,323,000	7/				
Unprogrammed Balance to Complete after FY 2014	$ 0					

1/ $ 14,123,000 reprogrammed to the project.
2/ $ (782,000) rescinded from the project.
3/ $ (54,000) transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for the use on this study effort is $7,000(x1000). This amount will be used to perform work on the study as follows: Initiate additional raising of cells at Eagle Island.
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $ 4,068,000 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The project consists of channels, passing lane, widening turns and bends, turning basins, dredged material disposal facility and a mitigation element. There are a total of 36.9 miles of channels varying in depth from 34 to 44 feet. The passing lane is 6.2 miles long, 200 feet wide and 42 feet deep. There are a total of 5 turn and 5 bend wideners. For the turning basins, the Anchorage basin is 42 feet deep, turning basin 1 is 38 feet deep, and turning basin 2 is 34 feet deep. The mitigation elements consist of a fish passage at Cape Fear River lock and dam number 1, 700 acres of land acquisition, and 30 acres of embayment. The Eagle Island dredged material disposal facility consists of the raising of Cells 1, 2, and 3 from 25 to 40 feet.

JUSTIFICATION: Waterborne commerce on the existing Wilmington Harbor project was, 6.9, 6.7, and 7.1 million tons, respectively, for the period 2008-2010. The recommended project would result in substantial savings ranging from $0.57 to $13.00 per ton in transportation and handling costs on certain commodities. The largest savings would be $13.00 per ton on liquefied gas followed by chrome ore at $6.88. The major commodities imported through the port are salt, chrome ore, fertilizer materials, basic chemicals, asphalt, alcohols and cement with major exports being tobacco, wood pulp and dimethyl terephthalate fibers. The Port of Wilmington handled 194,608 loaded containers in 2009; 250,048 in 2010; and 290,666 in 2011. The 42-foot project can handle vessels in the 35,000 to 60,000 ton class. For the portion of the project already deepened, estimated efficiencies have come to fruition. The average tons per vessel call before deepening (1999-2003) was 4,739 while after deepening the average tons per vessel call is 8,788, which is an 85% increase in efficiency. The current 32-foot channel in the Northeast Cape Fear River can handle vessels in the 25,000 ton class while the recommended 38-foot channel will handle vessels in the 40,000 ton class. Recently completed investments in container facilities, regional highway improvements, airport facilities, and refrigerated warehouse storage will result in greater opportunities for growth. The Wilmington Harbor Ocean Dredged Material Disposal Site (ODMDS) is available for dredged material disposal for the lower reaches. An existing disposal site, the Eagle Island DMDF, is available for the middle reach and the upper reach of the project. The average annual benefits are $39,292,000 for commercial navigation.

As of the date of this justification sheet, there is approximately 7,500,000 cubic yards of remaining disposal capacity in the three cells of the Eagle Island DMDF. Based on an estimated required disposal capacity of up to 1,500,000 cubic yards of operations and maintenance material per year and the one time new work material disposal of approximately 800,000 cubic yards, disposal capacity will become critical as early as FY 2015. The three cells within the Eagle Island DMDF are utilized for disposal of operations and maintenance material on the following cycle in any single fiscal year: one cell is being ditched and dried in preparation for the next dike raise on that cell; the second cell is being utilized to dispose of dredge material; and the third cell is undergoing construction to raise the dike to create capacity. Failure to raise a cell in accordance with this schedule will result in a shortage of DMDF disposal capacity. The secondary option for disposal is to carry the material offshore, which represents a substantial increase in operations and maintenance costs as compared to providing the required DMDF capacity to meet the need of the authorized Federal Navigation project. It has been determined that the most efficient procurement strategy for the DMDFs is a construction contract that consists of a base and options. This acquisition strategy anticipates a duration of twelve to twenty four months to physically complete any single DMDF construction activity.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate Planning, Engineering, and Design for FY 2014 Eagle Island contract	$ 1,500,000
Complete Contract Award for FY 2013 Eagle Island Dike Raise	$ 8,033,000
Continue Physical Monitoring Required to be in Compliance with EIS	$ 1,200,000
Continue Construction Management for FY 12 Eagle Island Contract, Deepening of the Anchorage Basin, and Initial Work on FY 13 Eagle Island Contract	$ 1,000,000
Total	$11,733,000

Funds in the amount of $7,000,000 are scheduled to be carried over unobligated into FY 2014.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate additional raising of Eagle Island	$12,400,000
Continue physical monitoring required to be in compliance with EIS	$ 800,000
Construction Management for Cell Raises	$ 600,000
Total	$13,800,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Separable Element (Navigation):		
Provide lands, easements, rights of way, and dredged material disposal area lands.	$ 2,437,000	$ 6,000
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	$ 25,184,000	
Pay 25 percent of the costs allocated to deep draft navigation during construction.	$ 104,604,000	
Pay 35 percent of costs allocated to Section 933 portion during construction.	$ 5,380,000	
Provide and maintain, at its own expense, the local service facilities necessary to realize the benefits of the general navigation features. (berthing areas)	$ 26,652,000	
Reimburse an additional 10 percent of the costs allocated to general navigation facilities within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations and dredged material disposal areas.	$ 39,405,000	
Total Non-Federal Costs (Navigation)	$ 203,662,000	$ 6,000
Separable Element (Eagle Island DMDF):		
Pay 25 percent of the cost of construction of the facilities.	$ 13,250,000	
Reimburse additional 10 percent of the costs of the facility within a period of 30 years following completion of construction	$ 5,300,000	
Total Non-Federal Costs (Eagle Island DMDF)	$ 18,550,000	$6,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and, for general navigation, reimburse its share of construction costs within a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: The state of North Carolina is the project sponsor. The PCA was executed on 26 March 1999. All work on the Eagle Island DMDF prior to FY 2000 was accomplished with advanced contributed funds under a memorandum of agreement executed in July 1997. The reimbursement of 10% of the general navigation features will be accomplished by the state by the year 2047, 30 years following the anticipated completion of the Eagle Island disposal facility work. The sponsor has provided its share of the estimated costs to date and continues to be willing to provide the non-Federal funds necessary to complete the project, including all reimbursement cost.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) costs estimate of $364,255,000 is an increase of $6,255,000 over the latest estimate ($358,000,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount ($)
Price Escalation on Construction Features	6,255,000
Total	6,255,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: The draft Environmental Impact Statement (EIS) for the deepening portion was filed with the EPA in February 1996. The final EIS was filed with the EPA in July 1996. 401 Certification was completed in October 1996. The final EIS for the DMDF portion was filed with the EPA in July 1996. A Record of Decision was signed in December 1996. A Finding of No Significant Impact for design changes was signed in June 2000.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1987. Funds to initiate construction were appropriated in FY 1998. The Wilmington Harbor, NC - 96 Act, and Wilmington Harbor, NC (Dredged Material Disposal Facilities) projects were combined in October 1998 to form this project. Fish and Wildlife Mitigation was completed in November 2012 at an estimated cost of $16,200,000. Funds were made available in FY 2012 Workplan that advanced the Planning, Engineering and Design for Deepening to Cape Fear Memorial Bridge by 12 months. The construction contract award for the Deepening to Cape Fear Memorial Bridge was advanced 24 months to September 2012 and the contract amount was significantly less than anticipated. This resulted in $19,426,000 in unobligated FY 2013 carry-in. This resulted in a reallocation of activities to be accomplished in FY 2013 as reflected above.

Wilmington Harbor, NC - 96 Act - Deepening Portion

SUMMARIZED DATA FOR SEPARABLE ELEMENTS

Estimated Appropriation Requirement (CoE)			$ 324,505,000
Estimated Appropriation Requirement (OFA)			$ 2,238,000
Estimated Total Appropriation Requirement			$ 326,743,000
Future Non-Federal Reimbursement			$ 39,405,000
Estimated Federal Cost (Ultimate)			$ 287,338,000
Estimated Non-Federal Cost			$ 203,662,000
Cash Contributions		$109,984,000	
Other Costs		$ 54,273,000	
Reimbursements	$ 39,405,000		
Navigation	$ 39,405,000		
Total Estimated Separable Element Cost			$ 491,000,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENT: 1.9 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENT: 1.4 to 1 at 7 percent

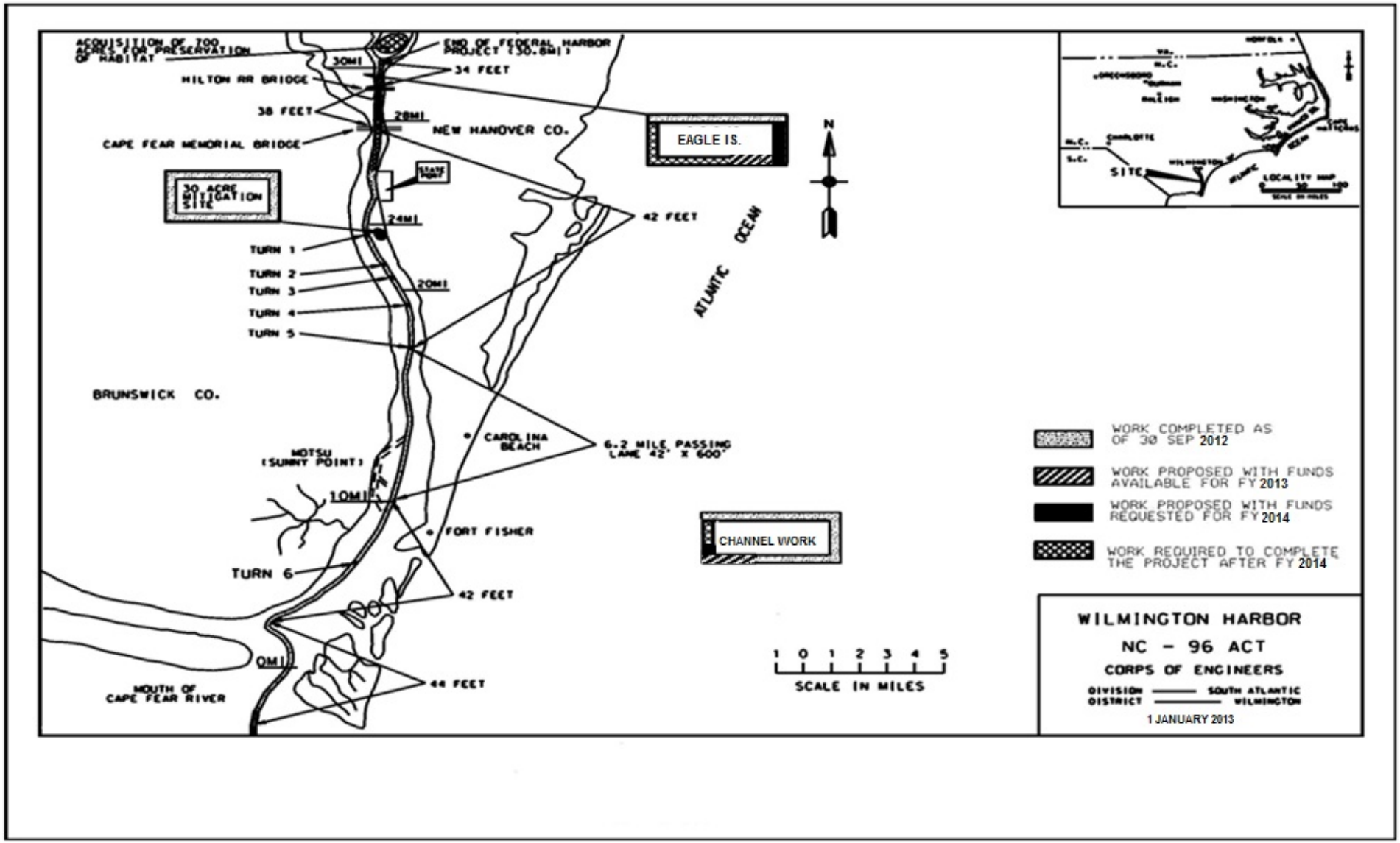
Wilmington Harbor, NC - 96 Act – Eagle Island DMDF

SUMMARIZED DATA FOR SEPARABLE ELEMENTS

Estimated Appropriation Requirement (CoE)			$ 39,750,000
Estimated Appropriation Requirement (OFA)			$ 0
Estimated Total Appropriation Requirement			$ 39,750,000
Future Non-Federal Reimbursement			$ 5,300,000
Estimated Federal Cost (Ultimate)			$ 34,450,000
Estimated Non-Federal Cost			$ 18,550,000
Cash Contributions		$ 13,250,000	
Other Costs		$ 5,300,000	
Reimbursements	$ 5,300,000		
Navigation	$ 5,300,000		
Total Estimated Separable Element Cost			$ 53,000,000

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENT: Not required for DMDF portion

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENT: Not required for DMDF portion


ACQUISITION OF 700 ACRES FOR PRESERVATION OF HABITAT
END OF FEDERAL HARBOR PROJECT (30.8MI)
30MI
34 FEET
HILTON RR BRIDGE
38 FEET
28MI
NEW HANOVER CO.
CAPE FEAR MEMORIAL BRIDGE
EAGLE IS.
30 ACRE MITIGATION SITE
42 FEET
24MI
TURN 1
TURN 2
TURN 3
20MI
TURN 4
TURN 5
ATLANTIC OCEAN
N
BRUNSWICK CO.
CAROLINA BEACH
6.2 MILE PASSING LANE 42' x 600'
MOTSU (SUNNY POINT)
10MI
FORT FISHER
CHANNEL WORK
TURN 6
42 FEET
0MI
MOUTH OF CAPE FEAR RIVER
44 FEET
1 0 1 2 3 4 5
SCALE IN MILES
SITE
WORK COMPLETED AS OF 30 SEP 2012
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2013
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014
WILMINGTON HARBOR
NC - 96 ACT
CORPS OF ENGINEERS
DIVISION — SOUTH ATLANTIC
DISTRICT — WILMINGTON
1 JANUARY 2013

APPROPRIATION TITLE: Construction - Flood Risk Management and Navigation

PROJECT: Wrightsville Beach, North Carolina (Continuing)

LOCATION: The project is located on a small island off the southeast coast of North Carolina, approximately 10 miles east of Wilmington in New Hanover County.

DESCRIPTION: The project provides for construction of a dune with a crown width of 25 feet at an elevation of 15 feet above mean low water and a berm with a crown width of 50 feet and a top elevation of 12 feet above mean low water for a distance of 14,000 feet with a periodic re-nourishment planned for every 4 years. Federal participation in future coastal storm damage reduction was reauthorized by the Water Resources Development Act of 1986. A Corps Section 111 study approved by Headquarters, U.S, Army Corps of Engineers in 1980 established that 46% of the coastal erosion/damage at Wrightsville Beach resulted from the Federal navigation improvements at Masonboro Inlet and is budgeted in the navigation business line as a mitigation requirement paid at 100 percent Federal cost. The remaining 54% of coastal erosion is due to coastal storms budgeted in the flood risk management business line and is cost shared at 65% Federal and 35% non-Federal. This results in an ultimate cost sharing of 81% Federal and 19% non-Federal.

AUTHORIZATION: Public Law 87-87, 23 October 1962, Section 203 and Public Law 99-662, 17 November 1986, Section 501.

REMAINING BENEFIT - REMAINING COST RATIO: 3.4 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 3.3 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 3.5 to 1 at 3.125 percent (1965).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation approved in October 1989 at February 1989 price levels. Benefit cost ratio based on a level 1 economic update dated July 2011.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			$ 29,943,000		Initial Construction	100	1965
Initial Construction		$ 688,000			Periodic Nourishment	54	TBD
Periodic Nourishment		$ 29,255,000					
					Entire Project	55	TBD
Estimated Non-Federal Cost			$ 7,720,000				
Initial Construction		$ 370,000					
Cash Contributions	$ 370,000						
Other Costs	$ 0						
Periodic Nourishment		$ 7,350,000					
Cash Contributions	$ 7,350,000						
Other Costs	0						
Total Estimated Project Cost			$ 37,663,000				
Allocations to 30 September 2010		$ 11,714,000					
Allocation for FY 2011		$ (299,000)					
Allocation for FY 2012		$ (1,165,000)					
Conference Allowance for FY 2013		$ 0					
Allocations through FY 2013		$ 10,250,000	1/ 2/ 3/ 5/	34			
Estimated Unobligated Carry-In Funds		$ 0	4/				
Budget Amount for FY 2014		$ 8,000,000	7/	61			
Programmed Balance to Complete after FY 2014		$ 11,693,000	6/				
Unprogrammed Balance to Complete after FY 2014		$ 0					

1/ $ (38,900) reprogrammed from the project.
2/ $ (9,000) rescinded from the project.
3/ $ (1,136,000) transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried in Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A
5/ PED costs of $0 are included in this amount.
6/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.
7/ Includes $4,000,000 in the Flood Risk Management business line and $4,000,000 in the Navigation business line for mitigation of identified navigation impacts.

PHYSICAL DATA: The project consists of a dune with a base generally bordering at or near the building line with a crown width of 25 feet at an elevation of 15 feet national geodetic vertical datum (NGVD), together with an integral shoreline berm with a crown width of 50 feet and a top elevation of 12 feet NGVD for a total distance of 14,000 feet.

JUSTIFICATION: The project provides coastal storm damage reduction from coastal wave erosion and hurricanes. The structures at Wrightsville Beach are primarily residential. Over $84,000,000 in new home construction has taken place since 2003. The July 2011 Level 1 economic report reaffirmed that the 1989 evaluation report was valid and it also stated the benefits are most likely understated. Wrightsville Beach experienced heavy losses during the hurricanes of 1944, 1954, 1955, 1958, and 1960. It is estimated that recurrence of those hurricanes would cause damages of about $56,837,000 at October 2012 price levels. The improvement reduces damages to the shoreline and property along the shoreline by providing coastal storm damage reduction from the hurricanes of equal or less intensity that that of Hurricanes Hazel, provides increased area for recreational use, and increased earning power for coastal-front and other property in the affected community. Based on the Chief's report, the project was authorized with an average annual quantity of 130,000 cubic yards on a 4 year nourishment cycle (520,000 cubic yards every 4 years). The project was constructed in 1965 requiring a total of about 2,993,000 cubic yards of sand from Banks Channel. Following the construction of the northern Masonboro Inlet jetty, the project suffered an unexpectedly high rate of erosion. This necessitated a placement of about 1,400,000 cubic yards of fill in the spring of 1970. After this placement the project was turned over to the sponsors. An emergency placement of 500,000 cubic yards occurred in April 1980, but the project still was not up to designed protection levels. In 1981, a complete restoration of the authorized project was performed by placing about 1,250,000 cubic yards. Subsequent nourishments occurred as follows: 900,000 cubic yards in 1986, 1,017,000 cubic yards in 1991, 619,000 cubic yards in 1994, 512,000 cubic yards in 1998, 423,000 cubic yards in 2002, 532,000 cubic yards in 2006, and the last nourishment occurred in 2010 using 451,000 cubic yards of sand. The nourishment in 1991 was significantly larger than the 520,000 amount estimated in the Chief's report due to higher than anticipated storm erosion and a 5 year period between periodic nourishment cycles. Since the 50-year authorization of the project in 1986, 7 periodic nourishment cycles have been completed out of an anticipated 13 cycles. The project is currently in year 27 of its 50 year project life. The project has proven to perform exceptionally well. For example, in 1996 when Hurricane Fran hit the southeastern coast of North Carolina hundreds of homes were destroyed in neighboring communities. At Wrightsville Beach not a single home or business was lost primarily due to the presence of the dune and berm. In addition to the homes and businesses present, the project also protects the main road. This road serves as the primary access to emergency services for the barrier island. If the project were compromised or not present both the ocean front and most other residences would be put in jeopardy in addition to the main access road for the island. With a warning time for most hurricanes being estimated at 48 hours, the life safety risks are minimal (LSHI). The average annual benefits are as follows at October 2012 levels.

Annual Benefits	Amount ($)
Hurricane Damage Prevention	1,138,000
Recreation	771,000
Total	1,909,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Complete the Design Documentation Report	$ 299,000
Total	$299,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate and complete plans and specifications for the 8th planned periodic re-nourishment	$ 300,000
Initiate and complete construction for the 8th planned periodic re-nourishment	
Renourishment budgeted in Flood Risk Management Business Line	$ 3,000,000
Renourishment budgeted in Navigation Business Line	$ 4,000,000
Construction management for the 8th planned periodic re-nourishment	$ 700,000
Total	$ 8,000,000

NON-FEDERAL COST: The town of Wrightsville Beach, North Carolina, the local sponsor, is complying with the requirements of local cooperation for initial construction and the completed periodic nourishment as set forth in the initial authorizing legislation. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.		
Modify or relocate utilities, roads, and other facilities, where necessary for the construction of the project.		
Pay 35 percent of the cost allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hurricane and storm damage reduction facilities.	$7,720,000	$4,900
Total Non-Federal Costs	$7,720,000	$4,900

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

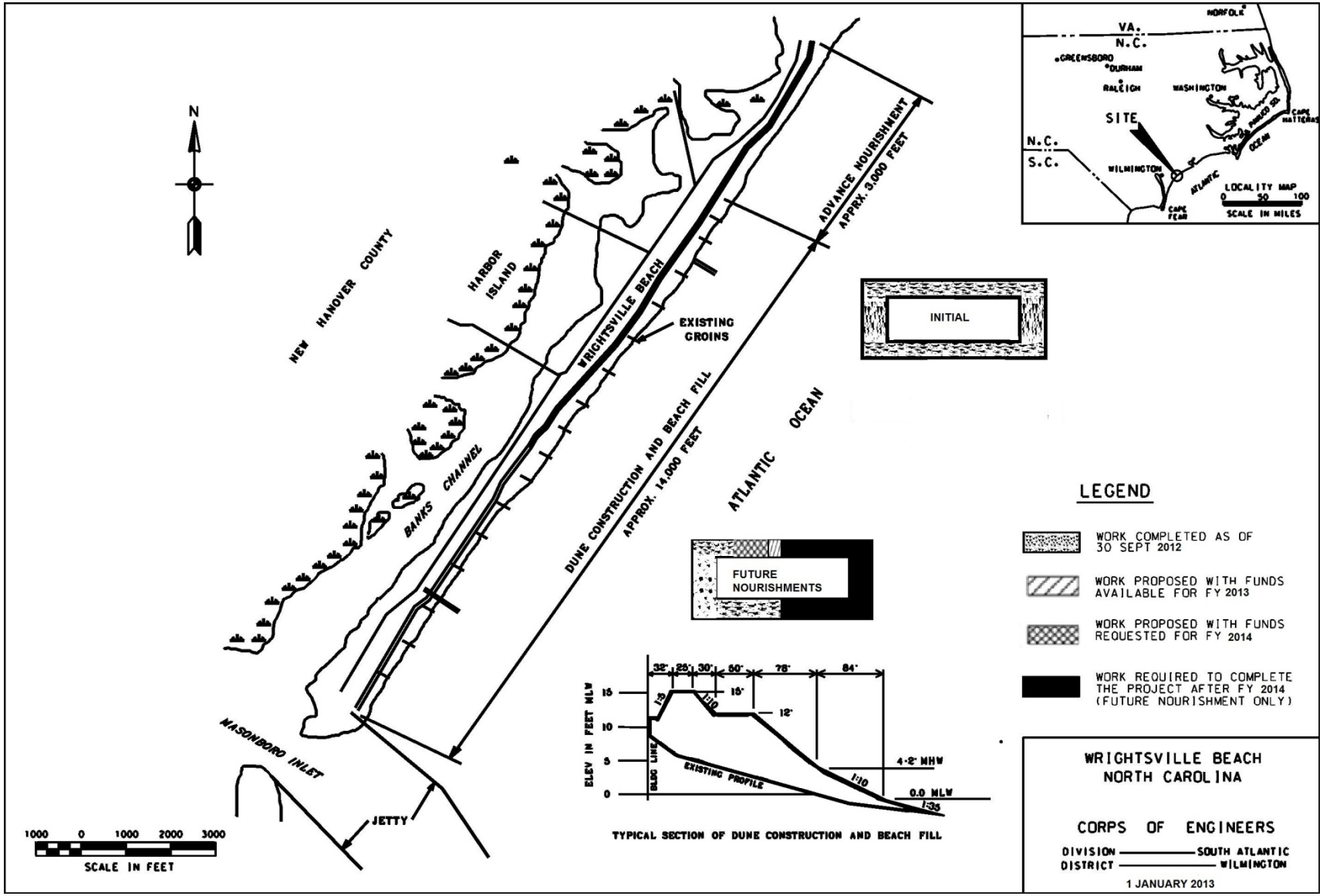
STATUS OF LOCAL COOPERATION: The town of Wrightsville Beach has complied with all the terms of local cooperation to date including initial construction and periodic nourishment through FY 2010. On 1 November 1983, a local occupancy tax went into effect in New Hanover County. Seventy-five percent of the revenues collected from this tax must be used for coastal storm damage reduction erosion control. A local cooperation agreement (LCA) was executed by the Assistant Secretary of the Army for Civil Works on 27 June 1990. All recent phone conversations with the sponsor indicate their continued support of the project and its estimated total local funding requirement of $7,720,000 for the 50-year economic life of the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $29,943,000 is an increase of $6,943,000 over the latest estimate ($23,000,000) submitted to Congress (FY 2006). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 2,000,000
Authorized Modifications	4,943,000
Total	$ 6,943,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Finding of No Significant Impact was signed in August 1989.

OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1964. In accordance with Section 156 of the Water Resources Development Act of 1976, Federal authorization for participation in the initial project was limited to work initiated before the end of calendar year 1980. The Water Resources Development Act of 1986 authorized future nourishment for 50 years. The change in Federal cost estimate reflected as an ‘authorized modification’ is a cost share adjustment due to the inclusion of the navigation mitigation component in this construction J-Sheet.


N
NEW HANOVER COUNTY
HARBOR ISLAND
WRIGHTSVILLE BEACH
EXISTING GROINS
ADVANCE NOURISHMENT APPRX. 3,000 FEET
DUNE CONSTRUCTION AND BEACH FILL APPROX. 14,000 FEET
ATLANTIC OCEAN
BANKS CHANNEL
MASONBORO INLET
JETTY
1000 0 1000 2000 3000
SCALE IN FEET
INITIAL
FUTURE NOURISHMENTS
VA.
N.C.
GREENSBORO
DURHAM
RALEIGH
WASHINGTON
NORFOLK
SITE
N.C.
S.C.
WILMINGTON
CAPE FEAR
CAPE HATTERAS
OCEAN
ATLANTIC
LOCALITY MAP
0 50 100
SCALE IN MILES
32' 25' 30' 50' 78' 84'
15
10
5
0
ELEV IN FEET NLW
1:5
1:10
15'
12'
BLDG LINE
EXISTING PROFILE
4.2' MHW
0.0 NLW
1:10
1:35
TYPICAL SECTION OF DUNE CONSTRUCTION AND BEACH FILL
LEGEND
WORK COMPLETED AS OF 30 SEPT 2012
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2013
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014 (FUTURE NOURISHMENT ONLY)
WRIGHTSVILLE BEACH
NORTH CAROLINA
CORPS OF ENGINEERS
DIVISION SOUTH ATLANTIC
DISTRICT WILMINGTON
1 JANUARY 2013

Puerto Rico

APPROPRIATION TITLE: Construction - (Flood Risk Management)

PROJECT: Rio Puerto Nuevo, Puerto Rico (Continuing)

LOCATION: The Rio Puerto Nuevo project is located within the San Juan Metropolitan Area along the north central coast of Puerto Rico. The Rio Puerto Nuevo basin joins the southeast side of San Juan Harbor and extends south and up into the foothills of the central mountains of Puerto Rico. The Rio Piedras, Rio Puerto Nuevo, Quebrada Margarita, Quebrada Josefina, Quebrada Dona Ana, Quebrada Buena Vista, and Quebrada Guaracanal traverse the basin. The Río Puerto Nuevo Basin drains 24 square miles.

DESCRIPTION: The plan of improvement provides flood damage protection by the construction in the Puerto Nuevo River and its tributaries of 1.7 miles of earth lined channel, 9.5 miles of concrete lined channels (of which 5.1 miles are high velocity), 2 debris basins and 2 stilling areas. The plan will also require the construction of 5 new bridges, the replacement of 17 bridges, and the modification of 8 existing bridges. Based on current estimates for Lands Easements Rights-of-way and Relocations, cost sharing for the flood control features of the project is 88.88% Federal and 11.12% non-Federal.

AUTHORIZATION: Section 401(a) of Water Resources Development Act of 1986 (P.L. 99-662 approved 17 November 1986) authorized the project for construction.

REMAINING BENEFIT - REMAINING COST RATIO: 5.4 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 1.4 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 1.2 to 1 at 8 percent (FY 1994).

BASIS OF BENEFIT - COST RATIO: Benefits are based on the latest economic update in the Level 2 Economic Update dated March 2012 at FY 2012 price levels. The economic update is based off the economic analysis in the revised General Design Memorandum dated June 1991 at October 1989 price levels. Initial Benefit-to-Cost Ratio reported in FY13 Justification Sheet was not in compliance with EC guidance and has been corrected on this submission.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$488,600,000			Relocations	40	TBD
					Roads, Railroads, Bridges	50	TBD
Estimated Non-Federal Cost		$172,700,000			Channels and Canals	65	TBD
Cash Contributions	$ 61,673,000				Recreation	0	TBD
Other Costs	$111,027,000						
					Entire Project	63	TBD
Total Estimated Project Cost		$661,300,000					
Allocations to 30 September 2010		$256,079,000					
Allocation for FY 2011		$ 20,689,000					
Allocation for FY 2012		$ 6,860,000					
Conference Allowance for FY 2013		$ 14,250,000	5/				
Allocations through FY 2013		$297,878,000	1/ 2/ 3/ 6/	61.0			
Estimated Unobligated Carry-In Funds		$ 0	4/				
President's Budget for FY 2014		$ 17,250,000		64.5			
Programmed Balance to Complete after FY 2014		$173,472,000	7/				
Un-programmed Balance to Complete after FY 2014		$ 0					

1/ $7,046,000 reprogrammed to the project.
2/ $495,000 rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $7,489,000 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The project includes 17 bridge replacements, 8 bridge modifications, 5 new bridge constructions, 1.7 miles of earth lined channel, 9.5 miles of rectangular concrete canals, 2 debris basins and 2 stilling areas.

JUSTIFICATION: The primary purpose of the project is to provide flood risk management benefits for structures, contents, and transportation infrastructure in the Rio Puerto Nuevo Basin and the San Juan, Puerto Rico Metropolitan Area. A combined property value of over $ 2,000,000,000 is subject to flooding, including: over 7,000 residential structures, 800 commercial establishments, the city's major transportation facilities, 1.5 square miles of major port facilities, recreation facilities, government offices, a major electrical power plant, and several wastewater/water treatment facilities. Therefore, flood waters from the Rio Puerto Nuevo represent a continuous threat to a significant portion of the population and the economic activity of the San Juan Metropolitan area. Intense development in the basin has altered the natural drainage patterns, significantly increased the runoff, and restricted the flow capacity of streams. More than thirty highway bridges have been identified as impeding flood flows and causing increased flooding. Development has progressed to the point where some of the tributary channels are not capable of carrying the two-year storm without causing flooding. In many areas, houses and other buildings are built adjacent to the banks of the channels and further restrict flood flows. The city of San Juan is always contained within the Presidential Disaster Declarations associated with Flooding in Puerto Rico. There have been 8 such events during the last 20 years. Tropical Storm Jeanne (in 2004) resulted in the Federal Emergency Management Agency expending over $350,000,000 in damage relief over the island. The average annual damages for the without project condition are $41,575,000. Average annual damages for the with project condition are $5,024,000. The budget amount will complete the Upper Margarita concrete channel protecting a densely populated urban area. The budget amount will also complete plans and specifications for upstream channel work between Roosevelt Ave. Bridge and the De Diego Bridge. The average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	$ 36,551,000
Total	$ 36,551,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Complete Bechara Middle Section contract	$ 9,309,000
Complete de Diego Bridge contract	3,113,000
Post Authorization Change Report	300,000
Planning, Engineering, and Design for Upper Margarita Channel	2,016,000
Construction Management	2,878,000
Total	$ 17,616,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Complete the Upper Margarita Channel contract	$ 13,226,000
Planning, Engineering, and Design for Upper Margarita Channel	$ 1,138,000
Construction Management for Upper Margarita Channel	$ 2,136,000
Initiate Plans & Specifications for contract completing 0.4 mile rectangular concrete channel between Roosevelt Avenue Bridge and completed De Diego Bridge segment	$ 750,000
Total	$ 17,250,000

NON-FEDERAL COST: In accordance with the cost sharing and financing plan reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way.	$ 41,616,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	$ 69,411,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation features.	$ 536,000	
Pay 11.12 percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to 25 percent as determined under Section 103 of the Water Resources Development Act, as amended, to reflect the non-Federal sponsor's ability to pay, but no less than 5 percent of the costs allocated to flood risk management, and bear all cost of operation, maintenance, repair, rehabilitation, and replacement of flood risk management features.	$ 61,137,000	
Total Non-Federal Cost	$ 172,700,000	

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

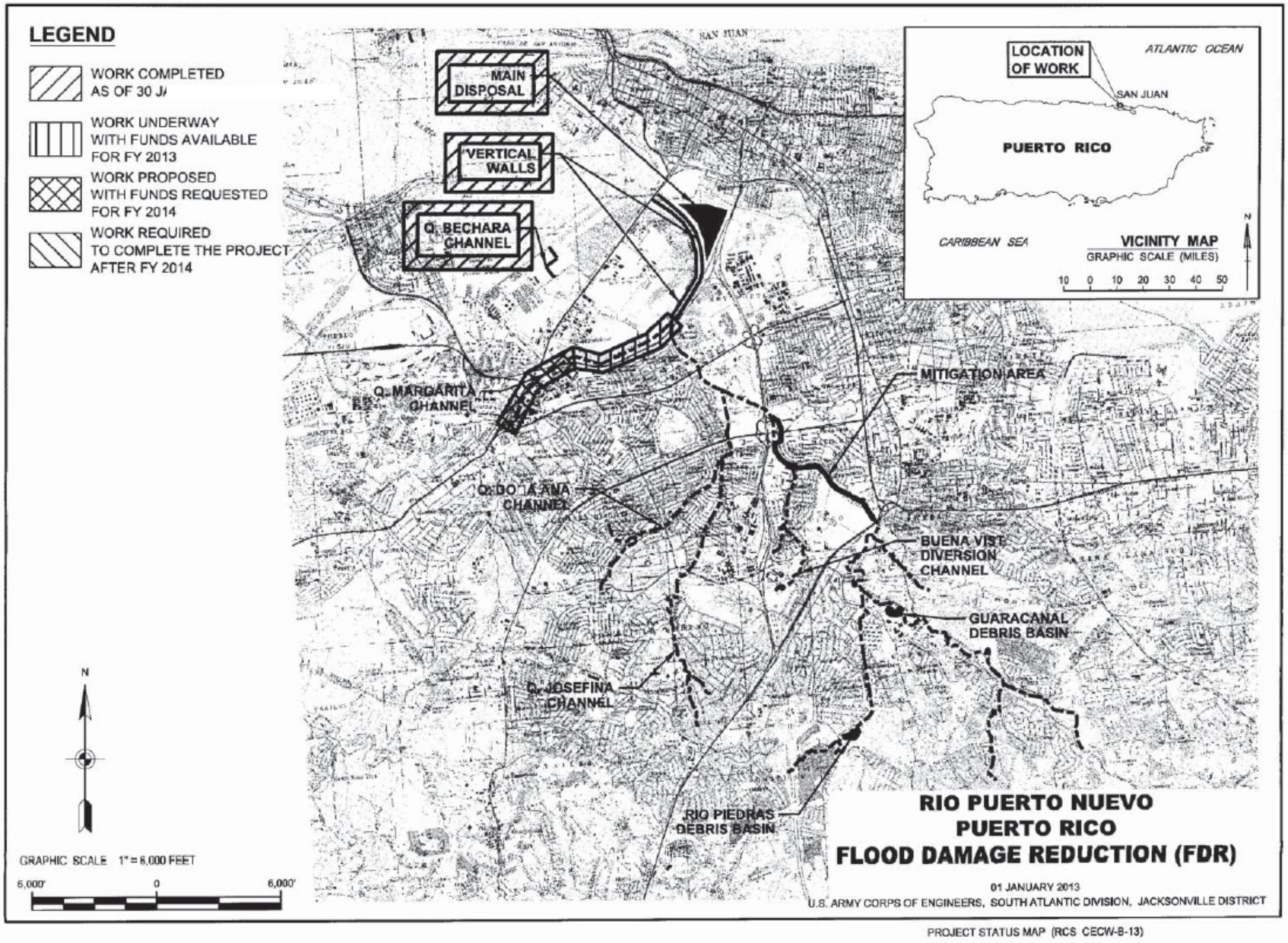
STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. A Project Cooperation Agreement for the project was executed in March 1994. The non-Federal sponsor's funds are derived from a combination of general revenue and sponsored funds budgeted by the Commonwealth of Puerto Rico. The non-Federal sponsor is willing and able to continue contributions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $488,600,000 reflects an increase of $39,200,000 from the latest estimate ($449,400,000) presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 3,395,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	$ 28,187,000
Schedule Changes	$ 7,618,000
Total	$ 39,200,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Impact Statement for the project was filed on 6 December 1985. The Finding of No Significant Impact was approved in July 1992. An Environmental Assessment (EA) was completed in May of 1993 with the associated General Design Memorandum, and another EA was completed in February of 2001 for the Bechera Lower Basin.

OTHER INFORMATION: Funds to initiate preconstruction, engineering and design were appropriated in Fiscal Year 1987. Funds to initiate construction were appropriated in Fiscal Year 1994. FY 2013 carry-in funds in the amount of $3,336,000 were made available as a result of delays in the DCAA audit completion for negotiating the contract modifications. The Post Authorization Change is needed as a result of updated cost estimates that reflect a significant increase in cost of lands for the remaining unconstructed features on the project. The 902 limit is not expected to be exceeded until after FY 2016.



PROJECT STATUS MAP (RCS CECW-B-13)

South Carolina

APPROPRIATION TITLE: Construction – Navigation (Dredged Material Disposal Facility)

PROJECT: Charleston Harbor, South Carolina (Continuing)

LOCATION: The Charleston Harbor Clouter Creek Dredge Material Disposal Facility (DMDF) is located on the east bank of the Cooper River to the east of North Charleston, South Carolina. It is bounded on the north, west and south by the Cooper River and on the east by Clouter Creek and is approximately1,475 acres in size and subdivided into four cells – North, South, Middle, and Highway.

DESCRIPTION: The Clouter Creek DMDF contains material from maintenance dredging of the completed project. A dike raising or capacity expansion to contain maintenance material is required periodically and budgeted as needed. A Project Partnership Agreement was executed with the South Carolina State Ports Authority in September 2010 for costs through FY 2018. The costs were documented in the Dredged Material Management Plan (DMMP) Preliminary Assessment for Charleston Harbor dated 23 June 2009 and approved by the South Atlantic Division Commander on 17 February 2010.

AUTHORIZATION: P.L. 104-303 dated 12 October 1996, Section 101

REMAINING BENEFIT - REMAINING COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

TOTAL BENEFIT - COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

INITIAL BENEFIT - COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

BASIS OF BENEFIT - COST RATIO: N/A; Benefits are related to the on-going operation and maintenance of the authorized navigation project.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST
Estimated Appropriation Requirement		$ 8,670,000		
Future Non-Federal Reimbursement	$ 1,156,000			
Estimated Federal Cost (Ultimate)		$ 7,514,000		
Estimated Non-Federal Cost		$ 4,046,000		
Cash Contributions	$ 2,890,000			
Other Costs	$ 0			
Reimbursements	$ 1,156,000			
Navigation	$ 1,156,000			
Total Estimated Project Cost		$ 11,560,000		
Allocations to 30 September 2010	$ 3,350,000			
Allocation for FY 2011	$ 300,000			
Allocation for FY 2012	$ 0			
Conference Allowance for FY 2013	$ 0	5/		
Allocations through FY 2013	$ 3,650,000	1/ 2/ 3/ 6/		42
Estimated Unobligated Carry-In Funds	$ 72,000	4/		
President's Budget for FY 2014	$ 226,000			45
Programmed Balance to Complete after FY 2014	$ 4,794,000	7/		
Un-programmed Balance to Complete after FY 2014	$ 0			

STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
North Cell Raising	0	TBD
Middle Cell Raising	0	TBD
South Cell Raising	50	TBD
Highway Cell Raising	50	TBD
Entire Project	25	TBD

1/ $0 reprogrammed from the project.
2/ $0 rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 from prior appropriations for use on this effort is $72(x1000). This amount will be used to perform work on the project as follows: Initiate plans and specifications for the North Cell to raise dikes from elevation 20 ft to 31 ft.
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED cost of $0 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: The Clouter Creek DMDF is approximately 1,475 acres in size and subdivided into four cells – North (190 acres), South (415 acres), Middle (410 acres), and Highway (460 acres). The current average dike elevations are: North Cell - 20 ft, Highway Cell -14 ft, Middle Cell - 20 ft, and South Cell - 27 ft. The North Cell is scheduled to be raised to 31 ft in FY 2015/FY 2016. The Middle Cell is scheduled to be raised to 25 ft in FY 2018. The Charleston Harbor dikes, as a matter of practice, are raised 5 feet in each cycle as the minimum and will go higher if the usage demand warrants it.

JUSTIFICATION: Latest commercial tonnage as reported by the Waterborne Commerce Statistics Center for FY 2011 was 17.9 million tons of cargo. The major commodity imported and exported is manufactured equipment and machinery. Charleston Harbor is listed as one of 17 United States (US) strategic ports because of the presence of the Joint Base Charleston, Military Surface Deployment and Distribution Command, Defense Energy Support Center and Army Strategic Logistics Activity Charleston. International trade through South Carolina ports facilitates 280,600 jobs across the state in the maritime, transportation, distribution and manufacturing industries while providing an overall economic impact of $45 billion each year. Per United States Department of Commerce (USDOC)/Bureau of the Census, the 2010 value of waterborne commerce through Charleston was $50.19 billion. The Clouter Creek DMDF is broken into four cells. As of the date of this justification sheet, the Highway and South cells are available for the receipt of maintenance material. These cells have a combined capacity of 6,800,000 cubic yards which is adequate to accommodate up to five years of maintenance dredging at an annual anticipated rate of 1,360,000 cubic yards. The North and Middle cells are at full capacity and are undergoing ditching and drying in preparation for FY 2015 construction contract to increase capacity. The ditching and drying process typically requires twenty-four to thirty-six months to complete. The North cell dike construction is scheduled to commence in FY 2015 with construction being physically complete in FY 2016. This insures that the North Cell will be available for use when Highway Cell is scheduled to be taken out of service for ditching and drying. The sequential raising of dikes in the DMDF is critical to the ability of the U.S. Army Corps of Engineers to maintain the Charleston Harbor Federal Navigation project and FY 2014 funding of plans and specifications supports the stated schedule.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

No activity scheduled to occur in FY 2013	$0
Total	$ 0

Funds in the amount of $72,000 are scheduled to be carried over unobligated into FY 2014.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate and complete plans and specifications for the North Cell to raise dikes from elevation 20 ft to 31 ft	$298,000
Total	$ 298,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights of way	$ 0	$ 0
Pay 25 percent of the costs allocated to general navigation facilities during construction.	$ 2,890,000	$ 0
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as reduced by a credit allowed or the value of lands, easements, rights of way, and relocations provided for commercial navigation.	$ 1,156,000	$ 0
Total Non-Federal Costs	$ 4,046,000	$ 0

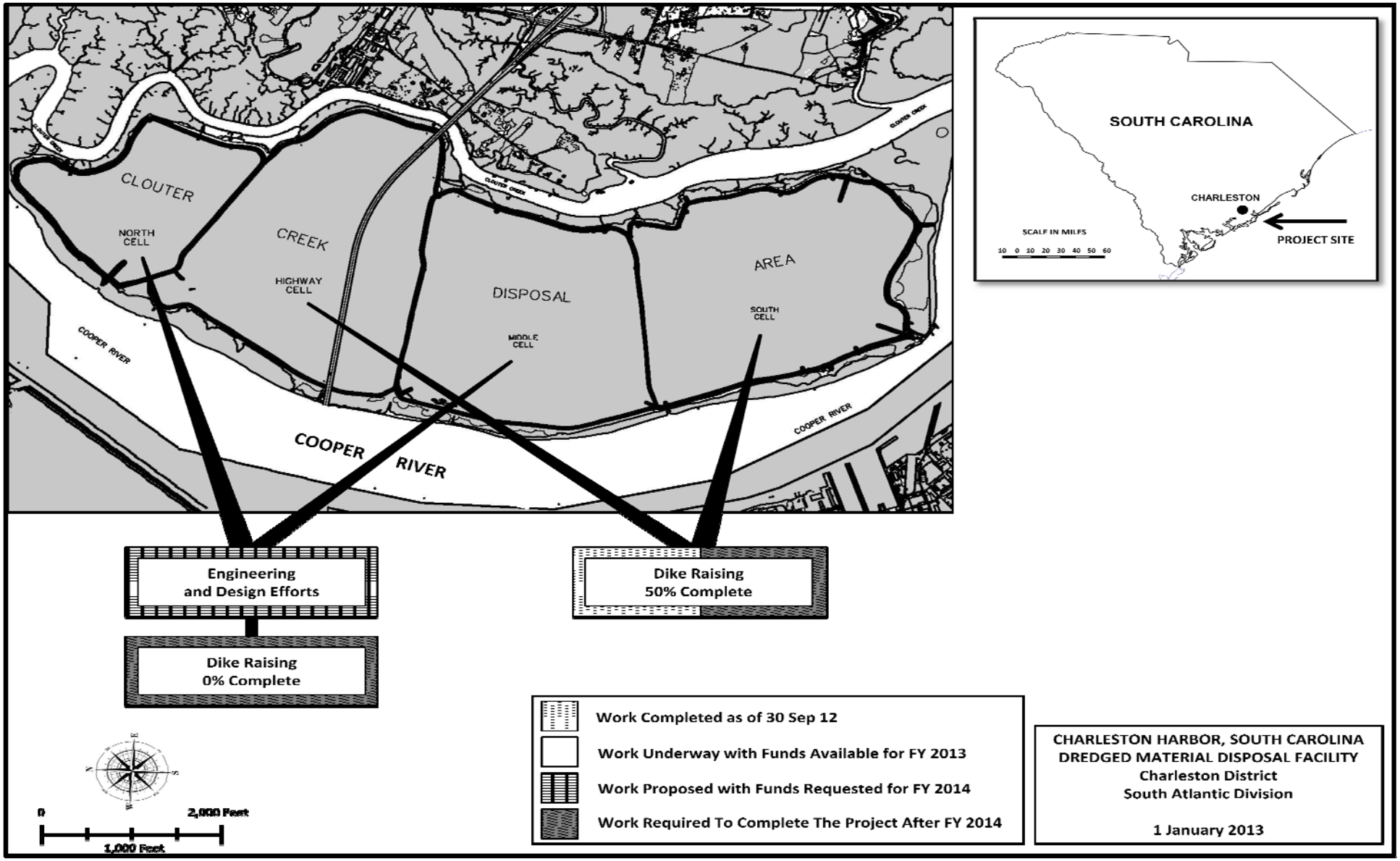
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and, for general navigation, reimburse its share of construction costs within a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: A Project Partnership Agreement was executed with the South Carolina State Ports Authority in September 2010. The non-Federal sponsor is financially capable and willing to contribute the non-Federal share.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $8,670,000 is the initial cost estimate presented to Congress under the construction appropriation. It was submitted in FY 2008 under the Operation and Maintenance appropriation justification sheet which did not require a detailed breakout or cost estimate of the entire project.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Environmental Assessment was completed as part of preparation of the Dredged Material Management Plan Preliminary Assessment for Charleston Harbor, dated 23 June 2009 and approved by the South Atlantic Division Commander on 17 February 2010. The Finding of No Significant Impact (FONSI) was signed in September 2009.

OTHER INFORMATION: Funds to initiate engineering and design work were appropriated in FY 2007 under the Operation and Maintenance account. Funds to initiate construction were budgeted in FY 2008 under the Operation and Maintenance account, however; they were appropriated under the Construction appropriation. Per latest budget guidance a maintenance DMDF is cost shared as a General Navigation Feature and is budgeted as a line item in the Construction account.


CLOUTER
CREEK
NORTH CELL
HIGHWAY CELL
DISPOSAL AREA
MIDDLE CELL
SOUTH CELL
COOPER RIVER
COOPER RIVER
COOPER RIVER
SOUTH CAROLINA
CHARLESTON
PROJECT SITE
SCALE IN MILES
10 0 10 20 30 40 50 60
Engineering and Design Efforts
Dike Raising 0% Complete
Dike Raising 50% Complete
0
2,000 Feet
1,000 Feet
Work Completed as of 30 Sep 12
Work Underway with Funds Available for FY 2013
Work Proposed with Funds Requested for FY 2014
Work Required To Complete The Project After FY 2014
CHARLESTON HARBOR, SOUTH CAROLINA
DREDGED MATERIAL DISPOSAL FACILITY
Charleston District
South Atlantic Division
1 January 2013

Virginia

APPROPRIATION TITLE: Construction - Flood Risk Management

PROJECT: Roanoke River Upper Basin, Virginia, Headwaters Area (Continuing)

LOCATION: The project is located in south central Virginia on the Roanoke River in the city of Roanoke, Virginia.

DESCRIPTION: The project includes about 6.2 miles of channel widening along the 10 miles of river through the city of Roanoke, Virginia. Channel widening has been accomplished with the construction of a benched channel above the elevation of the average stream flow. Other flood risk management features include flood proofing at two locations, training walls to prevent floodwater intrusion into low areas along the river, and a flood warning system. Recreation facilities consist of a 9.5-mile recreation trail along the project reach and access and parking areas. The final 3 miles of the recreation trail will not be constructed and is an un-programmed portion of the project.

AUTHORIZATION: Public Law 99-662, 21 January 1986, Section 401, and amended by Public Law 101-640, 28 November 1990, Section 102.

REMAINING BENEFIT - REMAINING COST RATIO: N/A; The project is substantially complete. Funds are for required monitoring in accordance with the biological opinion.

TOTAL BENEFIT - COST RATIO: N/A; The project is substantially complete. Funds are for required monitoring in accordance with the biological opinion.

INITIAL BENEFIT - COST RATIO: N/A; The project is substantially complete. Funds are for required monitoring in accordance with the biological opinion.

BASIS OF BENEFIT - COST RATIO: N/A; The project is substantially complete. Funds are for required monitoring in accordance with the biological opinion.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST
Estimated Federal Cost		$ 48,300,000		
Programmed Construction	$ 44,561,000			
Un-programmed Construction	$ 3,739,000			
Estimated Non-Federal Cost		$ 24,200,000		
Programmed Construction	$ 20,461,000			
Cash Contributions	$ 9,113,000			
Other Costs	$ 11,348,000			
Un-programmed Construction	$ 3,739,000			
Cash Contributions	$ 3,739,000			
Other Costs	$ 0			
Total Estimated Project Cost		$ 72,500,000		
Allocations to 30 September 2010		$ 41,004,000		
Allocation for FY 2011		$ 1,103,000		
Allocation for FY 2012		$ 1,554,000		
Conference Allowance for FY 2013		$ 0	5/	
Allocations through FY 2013		$ 43,661,000	1/ 2/ 3/ 6/	90.4
Estimated Unobligated Carry-In Funds		$ 92,000	4/	
Budget Amount for FY 2014		$ 300,000		91.0
Programmed Balance to Complete after FY 2014		$ 600,000	7/	
Unprogrammed Balance to Complete after FY 2014		$ 3,739,000		

STATUS (1 January 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Channel Excavation	100	Dec 2011
Training Walls	100	Jun 2009
Recreation Trail	70	TBD
Parking Areas	100	Mar 2005
Riprap	100	Jun 2011
Relocations	100	Jun 2011
Land Acquisitions	100	May 2010
Monitoring	20	TBD
Entire Project	96	TBD

1/ $ 239,965 reprogrammed to the project.
2/ $ (106,000) rescinded from the project.
3/ $ 0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried in Fiscal Year 2014 from prior appropriations for use on this study effort is $ 92 (x1000). This amount will be used to perform work on the study as follows: Continue required monitoring and associated project management activities.
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
6/ PED costs of $ 2,142,000 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: This flood risk reduction project includes the following features: 27,000 feet of channel excavation, 6,300 linear feet of training wall construction, a 50,160 linear foot paved recreation trail, one parking area, one access area, and 28,000 tons of riprap placement. In addition to these features relocations were required as follows: 3,880 linear feet of utilities, 2,000 linear feet of roadway, 6,350 linear feet of overhead lines, and 13 buildings. Real estate requirements included195 total rights of way, 185 flood risk reduction rights of way, and 40 temporary disposal areas.

JUSTIFICATION: The project provides improvements for flood risk management and recreation. Most of the property that would receive flood damage reduction serve industrial and commercial uses with a value of $1,393,000,000 at October 2012 price levels. The average annual damages in the project area are estimated at $11,836,000 at October 2012 price levels and 2012 level of development over the next 50 years if no flood risk management facilities were provided. The project would reduce these damages by $4,864,000. The maximum flood of record, November 1985, caused damages estimated at $245,856,000 at 2012 price levels. Floodplain development is not promoted by the project. Return on investments by local businesses is adversely affected by the flooding problem. Industrial and commercial property owners have to use their resources to repair and attempt flood proofing that could be used for expansion and modernization. In this respect, return on investment is suppressed. The project has a beneficial effect on a variety of businesses and increases return on investment throughout the flood plain. The average annual benefits are as follows at October 2012 price levels:

Annual Benefits	Amount ($)
Flood Damage Reduction	6,972,000
Recreation	2,520,000
Total	9,492,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Complete Interim Financial Closeout of Construction Activities	$450,000
Continue Monitoring of Endangered Species and Associated Project Management Tasks	$ 300,000
Total	$ 750,000

Funds in the amount of $92,000 are scheduled to be carried over unobligated into FY 2014.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue Monitoring of Endangered Species and Associated Project Management Tasks	$ 300,000
Total	$ 300,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way and dredged or excavated material disposal areas.	$ 6,206,000	
Modify or relocate buildings, utilities, roads and other facilities except railroad bridges, where necessary for construction of the project.	$ 5,142,000	
Pay 25 percent of the cost of the flood warning system (partially offset by a credit for lands, easements, rights of way, and relocations).	$ 10,000	
Pay 5 percent of the total cost allocated to flood risk management in cash in addition to all lands, easements, rights of way and relocations, and bear all costs of operation, maintenance, and replacement of flood risk management facilities.	$ 5,664,000	$ 101,000
Pay one-half of the separable cost allocated to recreation (partially offset by a credit for land, easements, rights of way and relocations) and bear all costs of operation, maintenance and replacement of recreation facilities.	$ 6,811,000	$ 9,000
Pay 25 percent of the cost of the non-structural flood proofing (partially offset by a credit for lands, easements, rights of way and relocations).	$ 367,000	
Total Non-Federal Costs	$ 24,200,000	$ 110,000

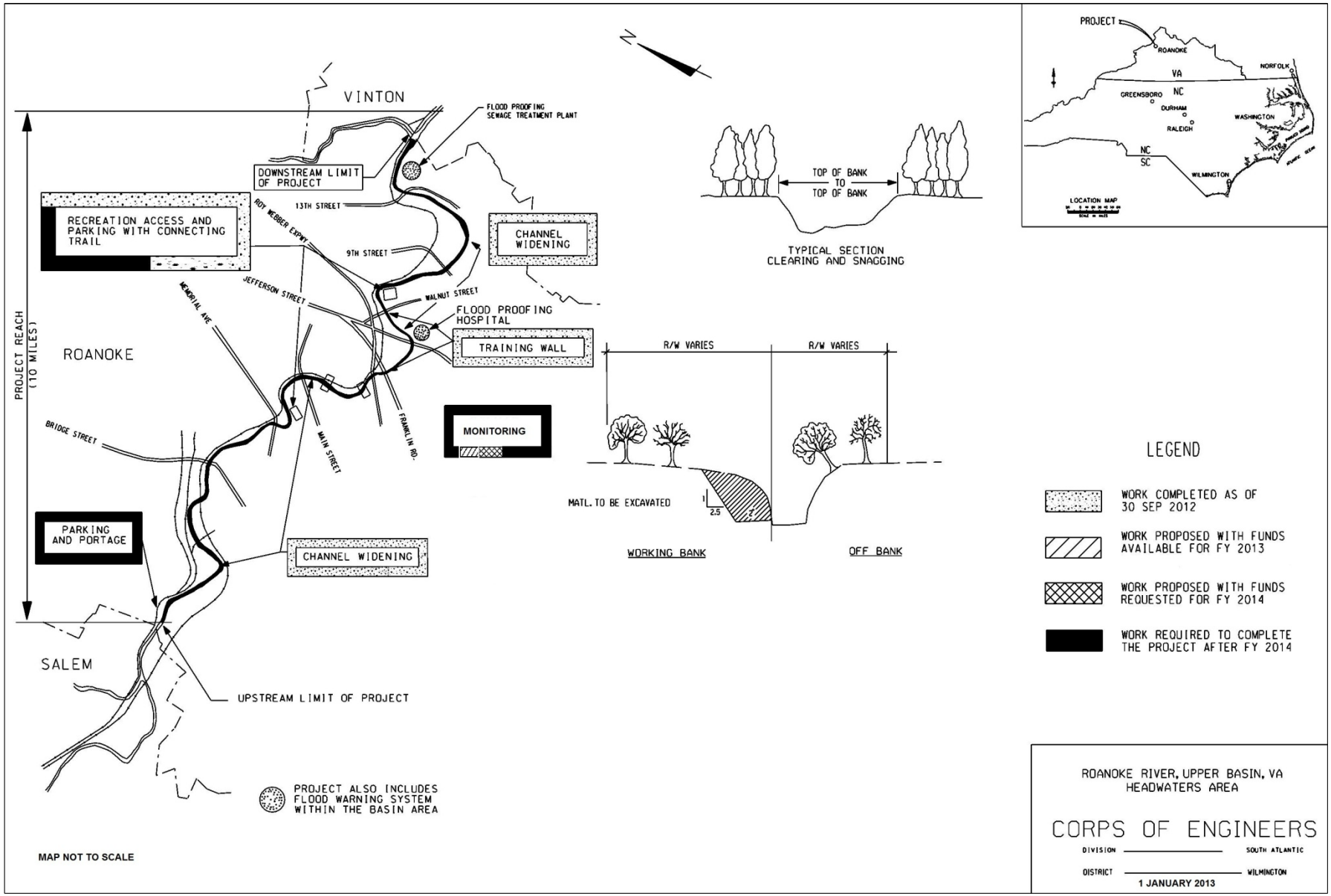
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The city of Roanoke is the project sponsor. On 11 April 1989, the voters of the city of Roanoke approved the sale of $7,500,000 worth of bonds to pay Roanoke's required cash contribution, acquire lands that are not currently owned and pay for relocation of bridges and utilities. The sponsor has already provided the appropriate amount of non-Federal funds estimated to meet their funding requirements through FY 2015. The local cooperation agreement was executed on 25 June 1990. A supplement to the local cooperation agreement, executed in January 1993, addressed the reimbursement for the flood proofing of the Roanoke Hospital. Initiation of construction of flood risk management features was delayed for eight years due to concerns the sponsor had over assuming liability for potential hazardous, toxic, and radioactive waste issues that might arise during project construction. The city in conjunction with the Corps of Engineers, Environmental Protection Agency and the Virginia Department of Environmental Quality conducted an extensive investigation and review of the project right of way to alleviate these concerns. Hazardous material was found at two sites. The landowner has cleaned these sites. Soil contamination was found at 14 other sites. A project action plan for the screening and disposal of this material was prepared and approved by the sponsor and the Virginia Department of Environmental Quality. The non-Federal Sponsor has provided their share of the project cost for all project features constructed to date.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of $48,300,000 is the same as the latest estimate presented to Congress (FY 2013).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final environmental impact statement was filed with the Environmental Protection Agency in February 1985. A finding of no significant impact for the design changes was signed on 30 June 1989.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 1990. There were two authorized project cost increases. The first was the Energy and Water Development Appropriations Act of 1990-Public Law 101-101, 29 September 1989, Section 110. The second was the Energy and Water Development Appropriations Act of 2004-Public Law 108-137, 1 December 2003, Section 148 which increased the total estimated project cost to $61,700,000 at October 2004 price levels ($83,451,000 at October 2012 price levels). The Roanoke Logperch, which is located in the project area, was listed as an endangered species effective 18 September 1989 and is being monitored. Monitoring could occur periodically up to 20 years, however the Corps is in negotiation with U.S. Fish and Wildlife Service to amend the monitoring requirement to a much shorter time frame based on observed performance of the project thus far. For each year that monitoring occurs, there is an associated $300,000 cost. Reimbursement for the Federal share of the flood proofing of the Roanoke Hospital, as authorized by Section 102(cc) of the Water Resources Development Act of 1990, in the amount of $501,000, was completed in February 1993. The sponsor has expressed that it has no intention of constructing the final 3 miles of the recreation trail, and plan to submit a formal letter to that affect. In FY 2012, final cost share balance activities were initiated and are scheduled to be completed within the FY 2013 available funds for in addition to the planned Monitoring of Endangered Species.


VINTON
FLOOD PROOFING SEWAGE TREATMENT PLANT
DOWNSTREAM LIMIT OF PROJECT
RECREATION ACCESS AND PARKING WITH CONNECTING TRAIL
ROY WEBBER EXPWY
13TH STREET
9TH STREET
CHANNEL WIDENING
JEFFERSON STREET
MEMORIAL AVE
WALNUT STREET
FLOOD PROOFING HOSPITAL
TRAINING WALL
PROJECT REACH (10 MILES)
ROANOKE
BRIDGE STREET
MAIN STREET
FRANKLIN RD.
MONITORING
PARKING AND PORTAGE
CHANNEL WIDENING
SALEM
UPSTREAM LIMIT OF PROJECT
PROJECT ALSO INCLUDES FLOOD WARNING SYSTEM WITHIN THE BASIN AREA
MAP NOT TO SCALE
TOP OF BANK TO TOP OF BANK
TYPICAL SECTION CLEARING AND SNAGGING
R/W VARIES
R/W VARIES
MATL. TO BE EXCAVATED
1
2.5
WORKING BANK
OFF BANK
PROJECT
ROANOKE
NORFOLK
VA
GREENSBORO
NC
DURHAM
RALEIGH
WASHINGTON
NC
SC
WILMINGTON
LOCATION MAP
LEGEND
WORK COMPLETED AS OF 30 SEP 2012
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2013
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014
ROANOKE RIVER, UPPER BASIN, VA
HEADWATERS AREA
CORPS OF ENGINEERS
DIVISION SOUTH ATLANTIC
DISTRICT WILMINGTON
1 JANUARY 2013

Operation and Maintenance

Alabama

O&M Justification Sheet

PROJECT NAME: Alabama-Coosa Comprehensive Water Study, AL

AUTHORIZATION: FY 1991 Energy and Water Development Appropriations Act

LOCATION AND DESCRIPTION: This project covers the Alabama-Coosa-Tallapoosa (ACT) and Apalachicola-Chattahoochee-Flint (ACF) drainage basins in Alabama, Georgia and Florida. The project was set up years ago to resolve issues related to water allocation issues on the ACT and ACF river basins. This project has been utilized to support the studies, reports, and other activities required to support the potential resolution of the ongoing disputes between the states of Alabama, Georgia and Florida. Numerous lawsuits have been filed and this project is required to support the Corps' litigation efforts.

CONFERENCE AMOUNT FOR FY 13: $246,000 2/
BUDGETED AMOUNT FOR FY 14: M: $0 O: $250,000 T: $250,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: $250,000 will be used for technical support for ongoing litigation issues on the Alabama-Coosa-Tallapoosa and Apalachicola-Chattahoochee-Flint River Systems. Activities include providing input to and review and commenting on briefs prepared by Department of Justice, reviewing and commenting on briefs filed by the Plaintiffs, responding to Freedom of Information Act requests, complying with the Endangered Species Act, consultations with Federal and State resource agencies and other correspondence.

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Alabama River Lakes, AL

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: This multiple purpose project is part of the Alabama-Coosa-Tallapoosa (ACT) River System and includes a 9 X 300 foot navigation channel that extends from the mouth of the Alabama River, some 45 miles north of Mobile, Alabama, for 300 miles northeast to Montgomery, Alabama, where it connects with the Coosa River. The Coosa River extends northeast another 286 miles to a point near Rome, GA. This project includes O&M funding for three projects located on the Alabama River: Claiborne, Millers Ferry and Robert F. Henry Locks and Dams.

CONFERENCE AMOUNT FOR FY 2013: $14,926,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $9,011,000 O: $7,316,000 T: $16,327,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $1,762,000 will provide caretaker operation for locks and spillway gate regulation to maintain pool at proper levels to prevent flooding and/or head limits at upstream dam.

FRM: $403,000 will be used to provide maintenance of the structures and equipment associated with the controlled release and storage of water.

RC: $2,940,000 will be used for operation and maintenance of recreation facilities on Alabama River Lakes including campgrounds, day use parks, fishing decks and boat ramp facilities. This is to maintain a level of service that will ensure safe recreation experiences and clean, orderly facilities.

H: $10,532,000 will be used for routine preventative maintenance to meet goals by limiting forced outages and maximizing peak unit availability, to collect water management data, and for dam safety.

EN: $690,000 will be used to protect fee-owned lands and waters against encroachments, and loss due to fire, pests and timber theft; to monitor boundary lines; and to respond to real estate requests. Other activities include intensive land maintenance and enhancement for wildlife and cultural resources investigations.

WS: N/A

OTHER INFORMATION: Two hydropower plants on the project provide a critical contribution to our nation's power grid. Recreation areas and associated economic activity are major contributors to quality of life for the citizens in one of the most economically disadvantaged regions of the United States.

There is a legal obligation to complete the ACT Water Control Manual. Funding for the manual is also included in the overall budget for this project.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Black Warrior and Tombigbee Rivers (BWT), AL

AUTHORIZATION: The project was authorized by various River and Harbor Acts, 1884-1986. Replacement of obsolete structures was authorized by the 1909 River and Harbor Act.

LOCATION AND DESCRIPTION: The project includes a 9 X 200 foot navigation channel from Mobile Harbor, north for 426 miles, connecting the Port of Mobile with the industrial areas of Birmingham, Alabama, and serving as the corridor from the Tennessee-Tombigbee Waterway to the Gulf of Mexico and includes six locks, dams and reservoirs.

CONFERENCE AMOUNT FOR FY 2013: $20,971,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $15,232,000 O: $10,204,000 T: $25,436,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $22,033,000 will be used for lock and dam operations and maintenance and maintenance dredging activities including channel surveys. This will improve navigation performance by increasing the availability of channel and reliability of the six locks and dams on this high use inland system.

FRM: N/A

RC: $3,070,000 will be used for normal operation and maintenance of recreational facilities to accommodate visitation at campgrounds, day use parks, fishing areas and boat ramp facilities. This is to maintain a level of service that will ensure safe recreation experiences and clean, orderly facilities.

H: N/A

EN: $333,000 will be used for salaries, equipment, supplies and material necessary for stewardship at the projects. Funds will also be used for intensive wildlife management of the project lands, natural resources surveys and cultural resource activities.

WS: N/A

OTHER INFORMATION: This waterway is extremely important for the shipment of coal as an export and to support several coal-fired electric generating plants in the southeastern United States. The waterway also provides critical transportation of crude oil to an oil refinery and transportation of ore and steel for foundries. Visitation to recreation areas on the BWT provides economic growth in some of the most economically disadvantaged areas of the United States.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Gulf Intracoastal Waterway (GIWW), AL

AUTHORIZATION: River and Harbor Act of 1966, as amended and prior acts

LOCATION AND DESCRIPTION: The Mobile District portion of the GIWW extends from the Louisiana/Mississippi state line to Apalachee Bay, Florida, providing a 12 x 150-foot channel from Louisiana to Mobile Bay, Alabama and a 12 x 125-foot channel from Mobile Bay to Apalachee Bay, Florida. The project supports major barge traffic providing the east/west transit route along the northern Gulf Coast for coal, petroleum products, chemicals, wood products and heavy industrial components. This project also supports high-end recreational traffic and waterway tourism industry.

CONFERENCE AMOUNT FOR FY 2013: $5,608,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $5,119,000 O: $350,000 T: $5,469,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $5,469,000 will be used for dredging, surveys and disposal area maintenance.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project is critical to the national defense due to the fact that Eglin, Hurlburt and Tyndall Air Force Bases all receive their jet fuel by way of this waterway. This waterway is critical to the southeast region of the United States in that all the fuel terminals and coal fired power plants along the Gulf Coast receive their shipments by barge.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Mobile Harbor, AL

AUTHORIZATION: Section 104 of the River and Harbor Act of 3 September 1954 and previous acts. The Theodore Ship Channel was authorized by Section 201 of the 1965 Flood Control Act and modified by Section 112 of WRDA 1976.

LOCATION AND DESCRIPTION: The project is located in Mobile, Alabama. The project provides a 47 x 600 foot channel from the Gulf of Mexico into Mobile Bay, a 45 x 400 foot channel in the Bay to the McDuffie Coal terminal, a 40 x 500 foot channel in the Mobile River to the Cochrane-Africatown Bridge, a 25 x 250-500 foot channel leading to and into Chickasaw Creek, and various smaller channels and turning basins for use by commercial, international and domestic marine traffic, including the Theodore Industrial Channel. The Port of Mobile supports a major coal import/export facility supplying coal for all the power plants across the northern Gulf Coast as well as petroleum products, wood products, containers, etc.

CONFERENCE AMOUNT FOR FY 2013: $30,071,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $26,490,000 O: $510,000 T: $27,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $27,000,000 will be used for maintenance dredging of the bay channel, river channel, the turning basin, disposal area maintenance, surveys, water quality, and endangered species coordination. These funds are necessary to maintain and reestablish project depths that have decreased due to shoaling. This will improve navigation performance by increasing the availability of channel to project depth, thereby eliminating the need for light loading or delays awaiting tides to access a strategic terminal. These funds would ensure adequate disposal area capacity is available to contain the material dredged from the channels in the coming years.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Mobile Harbor is the 9th largest port in the U.S.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Tennessee-Tombigbee Waterway (TTWW) - Wildlife Mitigation, AL & MS

AUTHORIZATION: Water Resources Development Act 1986, 1992

LOCATION AND DESCRIPTION: The project consists of three major components: (1) acquisition and management of 88,000 acres of separable mitigation lands at specific locations in Alabama and Mississippi; (2) management of an additional 93,000 acres of existing Corps lands at specific locations in Alabama and Mississippi; and (3) implementation of an initial development program on 181,000 acres of lands comprising the Mitigation Program. Most of the mitigation lands are organized into contiguous management units distributed between 10 wildlife management areas (7 in Mississippi and 3 in Alabama). The State wildlife management agencies are responsible for the management of all but 50,000 acres that are managed by the Corps.

CONFERENCE AMOUNT FOR FY 2013: $1,901,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $455,000 O: $1,365,000 T: $1,820,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: $1,820,000 will be used to reimburse the states of Mississippi and Alabama for costs incurred for intensive wildlife management as mandated by the Water Resources Development Act 1986.

WS: N/A

OTHER INFORMATION: Funding will support oversight and management by state wildlife agencies in Mississippi and Alabama for a total of ten Wildlife Management Areas (WMAs) – seven WMAs in the state of Mississippi and three WMAs in the state of Alabama. These WMAs promote long-term public access, use, conservation and management of natural resources, particularly wildlife, consistent with the Corps mission mandate for natural resources management.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Tennessee-Tombigbee Waterway (TTWW), AL & MS

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: The project extends from Demopolis, AL to the Tennessee River at the common boundary of Alabama, Mississippi and Tennessee. The project includes a 234-mile navigation channel varying from 9-12 feet X 300 feet, 10 locks and dams, and numerous recreation areas.

CONFERENCE AMOUNT FOR FY 2013: $22,852,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $11,407,000 O: $12,024,000 T: $23,431,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $17,896,000 will be used for lock and dam maintenance and operation and maintenance dredging. This will improve navigation performance by increasing the availability of channel and reliability of the 10 locks and dams on this important moderate use inland system.

FRM: N/A

RC: $4,565,000 will be used for rehabilitation, repair and maintenance of recreation facilities including campgrounds, day use parks, fishing decks and boat ramp facilities. This is to maintain a level of service that will ensure safe recreation experiences and clean, orderly facilities.

H: N/A

EN: $970,000 will be used for intensive wildlife management on 34,671 acres ($522,000); recurring annual herbicide treatment of invasive aquatic species threatening to seriously degrade operational, recreational, and wildlife habitats on over 23000 acres ($423,000); and routine maintenance of the US Snagboat Montgomery to include cleaning and painting ($25,000).

WS: N/A

OTHER INFORMATION: The project employs approximately 100 - 112 full time Federal personnel and 12 - 17 part time personnel. The project also helps support numerous district office personnel and an O&M contract consisting of approximately 85 employees. Funding is also required to support the operation and maintenance of a 234-mile navigation channel, 7 Class A campgrounds, 3 visitor centers, 1 historical landmark, 40 boat ramps, 9 large public-use areas, 72,500 acres of project wildlife mitigation land, 2 office buildings and 10 locks and dams. Visitation to the project exceeds two million annually. By connecting the Tennessee River to the Tombigbee River, the Waterway provides a shortcut of as much as 650 miles for vessels traveling from inland waterways in Middle America to the Gulf of Mexico.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Walter F. George Lock and Dam, AL & GA

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, as amended

LOCATION AND DESCRIPTION: The project is located at mile 75.2 on the Chattahoochee River, 1.5 miles north of Ft. Gaines, Georgia, in Clay County, Georgia and Henry County, Alabama. The project includes a hydroelectric powerhouse, 28 recreation areas, a navigation lock and a 45,000-acre reservoir with 640 miles of shoreline.

CONFERENCE AMOUNT FOR FY 2013: $8,042,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $3,739,000 O: $4,823,000 T: $8,562,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $1,167,000 will be used for the critical annual maintenance of the structure and equipment associated with the controlled releases of water, dam safety activities and other caretaker status activities.

FRM: N/A

RC: $2,433,000 will be used for the annual operation and maintenance of several recreational areas.

H: $4,679,000 will be used for routine preventative maintenance to accomplish the project mission by limiting forced outages and maximizing peak unit availability. This is essential to meeting performance goals, customer satisfaction, and public health and safety requirements.

EN: $283,000 will be used for the implementation of the shoreline management program, the forest management program, the wildlife habitat program, and the aquatic weed control program. Funds will also be used for cultural resource activities and the initiation of the update of the master plan.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Florida

O&M Justification Sheet

PROJECT NAME: Canaveral Harbor, FL

AUTHORIZATION: River and Harbor Act 2 March 1945 (PL 79-14) authorized the construction of an entrance channel, jetties, a turning basin enclosed by a dike, and a barge canal with a lock connecting the turning basin with the Intracoastal Waterway Jacksonville to Miami. River and Harbor Act, (PL 87-874) 23 Oct. 1962, as described in Senate Document No. 140, 87th Congress 2nd Session; "Maintenance by means of a sand transfer plant and conventional dredging of authorized channel depths of 37 feet in the existing entrance channel, 36 feet in the existing inner channel, and 35 feet in the existing turning basin."

LOCATION AND DESCRIPTION: Canaveral Harbor is located in Brevard County on the recurving shore of Cape Canaveral in an area known as the Canaveral Bight. The two nearest deep-water ports are Jacksonville, 155 miles north, and Ft. Pierce 40 miles south. Project consists of maintenance of an entrance channel 41 feet deep and 400 feet wide; an inner channel 40 feet deep and 400 feet wide; a 1,200 foot diameter turning basin 39 feet deep; a channel 39 feet deep and 400 feet wide for an 1,800 foot length; enlargement of barge channel to 12 feet deep and 125 feet wide to the Intracoastal Waterway; a channel extension 31 feet deep by 300 feet wide by 1,500 feet long dredged west of the turning basin; a barge lock 90 feet wide and 600 feet long west of the harbor dike; and two entrance jetties to the 12-foot contour. Length of the project is about 11.5 miles. The entrance channel and part of the inner channel have been deepened to 44 feet for the Navy's Trident Project.

CONFERENCE AMOUNT FOR FY 2013: $4,700,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $3,050,000 O: $1,348,000 T: $4,398,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $4,398,000 will be used to advertise and award a contract for maintenance dredging in FY 2014. The contract will require dredging of the most critically shoaled areas with particular emphasis on Cut 1, Cut 1-B, Cut 2, Middle Turning Basin and Inner Channel; will also fund the required condition surveys of the channel. This will allow the channel to remain open for both Civilian and Naval traffic. Additionally, the operation funds will allow for the annual expenses of continued operation of the Canaveral Lock to include minimum funding for labor, facilities and security.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 3,437,000 tons of cargo passes through Canaveral Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Central & Southern Florida (C&SF), FL

AUTHORIZATION: Flood Control Acts of 1948, 1954, 1958, 1960, 1962, 1965, 1968, Water Resources Development Act (WRDA) of 1992, 1996, and 2000

LOCATION AND DESCRIPTION: The project, covering an area of approximately 16,000 square miles, lies within the southeasterly 18 counties of Florida, but does include the upper St. Johns River Basin, located in the northeastern section of the project; the Kissimmee River Basin, in the central section; the Lake Okeechobee-Everglades in the central and southwestern section; East Coast-Everglades in the southeastern section. The project provides for flood relief and water conservation and provides principally for: an East Coast Protective Levee extending from Homestead area north to eastern shore of Lake Okeechobee near St. Lucie Canal; three conservation areas for water impoundment in Everglades area west of East Coast Protective Levee, with control structures to effect transfer of water as necessary; local protection works along lower east coast; encirclement of Lake Okeechobee agricultural area by levees and canals; enlargement of portions of Miami, North New River, Hillsboro, and West Palm Beach canals; enlargement of existing Lake Okeechobee levees and construction of new levees on the northeast and northwest shores of the lake; increased outlet capacity for improved control of Lake Okeechobee; floodway channels in the Kissimmee River Basin, with suitable control structures to prevent over drainage; an interrelated system of canals, levees, pumping stations and structures in southwest Dade County to control water levels; and facilities for regulation of floods in the upper St. Johns River Basin.

CONFERENCE AMOUNT FOR FY 2013: $14,444,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $6,993,000 0: $ 7,798,000 T: $14,791,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:
N: $1,122,000 provides for minimal operations and maintenance to support navigation suitable for commercial and recreational craft, consisting of two locks and the 155 mile long channel along the Okeechobee.
FRM: $12,673,000 will provide water control and protection from the recurrence of devastating floodwaters from the Everglades and local sources, for the highway-developed urban area along the lower east coast of Florida, and for the productive agricultural areas around Lake Okeechobee (including the towns around the lake) and south Dade County. The project includes a total of 89 miles of levees, 954 miles of canals, 30 pumping plants, 192 floodway control and diversion structures, 26 navigation locks, and 57 railroad relocations (bridges).
RC: $682,000 will provide operation and maintenance of vistor and recreation facilities serving over two million visitors, at W.P. Franklin Lock and along the waterway as associated with the C&SF project. Assets include campgrounds, visitor center, picnic sites, boat ramps, utilties and provision of ranger staff, volunteers, water safety, contract support for repairs, maintenance and mowing in order to promote safe visitor activities associated with the project.
H: N/A
EN: $314,000 will provide mangement of threatened and endangered species, flora and fauna as appropriate, land use managment activities, Ranger staff, biologists, volunteers and contract support for the eradication and control of invasive species.
WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Escambia and Conecuh Rivers, FL

AUTHORIZATION: River and Harbor Acts of 14 June 1880, 2 March 1907 and 3 July 1958

LOCATION AND DESCRIPTION: The Escambia-Conecuh Rivers are names applied to a single stream, a portion of which is located in Alabama known as the Conecuh River and a portion in Florida known as the Escambia River. This project consists of Bay and River channels that are 100 x 10 feet. The project serves barge transportation needs of the Ascend Performance Materials LLC and Gulf Power companies, major industries in this region. It has steady commercial traffic and requires little maintenance, making it a very cost-effective project to maintain.

CONFERENCE AMOUNT FOR FY 2013: $1,600,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $0 O: $34,000 T: $34,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $34,000 will be used to perform environmental monitoring related to the construction of Mackey Island disposal area. This site was constructed near the mouth of the river and is a beneficial use disposal area that requires annual monitoring and reports to be submitted to Florida Department of Environmental Protection in compliance with the Water Quality Control. These funds would ensure disposal area capacity is available in the following year's dredging cycle.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Gulf Power Crist Plant is critical to the regional power grid. Both Gulf Power and Ascend Performance Materials contend that their facilities can not survive without this project. The local railway systems and highway systems could not handle the volume (approximately 3.5 million tons) of traffic that would be required to furnish the coal, limestone, and other raw materials required by these companies and currently supplied by barges. Between these two companies they employ almost 3,000 employees.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Intracoastal Waterway (IWW) - Jacksonville to Miami, FL

AUTHORIZATION: River & Harbor Act of 1927 and the River & Harbor Act of 1945

LOCATION AND DESCRIPTION: The entire IWW lies within the Jacksonville District boundary. The project starts at the St. Johns River in Duval County and then runs the entire length of the state where it ends in Miami Dade County.

The IWW project authorizes a channel 12 feet deep by 125 feet wide from Jacksonville, Florida south to Fort Pierce, Florida, and is 10 feet deep by 125 feet wide from Ft. Pierce, Florida south to Miami, Florida. The length of the project is approximately 349 miles running from the St. Johns River in northeast Florida southward along the east coast to Miami, Florida.

A Memorandum of Agreement with the Florida Inland Navigation District (FIND) (sponsor) to contribute funds for the Operation and Maintenance (O&M) of the IWW was executed on September 3, 1997. Since that date, FIND has provided over $50,000,000 for the O&M of the waterway.

CONFERENCE AMOUNT FOR FY 2013: $0 2/
BUDGETED AMOUNT FOR FY 2014: M: $0 O: $250,000 T: $250,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $250,000 provides funding required to perform hydrographic surveys and real estate activities along the IWW.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 14,000 tons of cargo pass through the IWW on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Jacksonville Harbor, FL

AUTHORIZATION: River and Harbors Act of 1965, Section 101(a)(17) of the WRDA of 1999, and Section 129 of the Energy and Water Development Appropriation Act of 2006, PL 109-103

LOCATION AND DESCRIPTION: The project provides a channel 40 feet deep from ocean to Mile 20, via Dames Point-Fulton Cutoff, thence 34 feet to Commodore Point, and thence 30 feet deep to the Florida East Coast Railway Bridge at Dames Point Fulton Channel; maintenance of the existing 42- and 40-foot depth entrance channel; widening of channel by 100 feet near Mile 5, by 200 feet near Mile 7 and Chaseville Turn; maintenance of jetties at channel entrance; construction and maintenance of training walls and revetments; a navigation and floodway channel 26 feet by 200 feet along south side of Commodore Point; and approach and mooring basin 20 feet deep, 1,300 feet long at 20-foot depth contour and 600 feet long at pier head line near Naval Reserve Armory in South Jacksonville, a depth of 24 feet between that depth contour and the pier head line from Hogan Creek to the foot of Laura Street; and a depth of 28 feet to within 60 feet long at pier head line between the foot of Laura Street and St. Elmo W. Acosta (formerly upper state) Bridge. Length of project is about 26.8 miles.

CONFERENCE AMOUNT FOR FY 2013: $6,063,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $8,651,000 O: $363,000 T: $9,014,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $9,014,000 provides routine operations and maintenance for navigation at this strategic port. These funds provide for project condition surveys, maintenance of critical shoals which would improve navigation performance by increasing the availability and reliability of the federal channel, maintenance of training walls and dredge material disposal facilities, and ongoing Dredge Material Management Plans and Ocean Dredge Material Disposal Site (ODMDS) studies. Funds would also be used to modify the Water Quality Certificate for nearshore placement.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Without maintenance of the federal channel, harbor pilots have indicated restrictions would be implemented, reducing two-way traffic and tide restricted movements. Nearshore placement would allow material that may go to the ODMDS to be kept in the littoral system and supports Regional Sediment Management. Over 17,597,000 tons of cargo pass through Jacksonville Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Jim Woodruff Lock and Dam, FL, AL & GA

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, as amended

LOCATION AND DESCRIPTION: The Jim Woodruff L &D project is located at Mile 107.3 on the Apalachicola River at the confluence of the Chattahoochee and Flint Rivers (ACF), about 45 miles northwest of Tallahassee, Florida. The project includes a dam, powerhouse, navigation lock, fixed and gated spillways, 39 recreational areas and a 37,500-acre reservoir (Lake Seminole) with 532 miles of shoreline. The project received over 1.3 million visitors last year. Effective and efficient operation of the project is contingent on efficient operation of the ACF Rivers Project and Walter F. George Lock & Dam.

CONFERENCE AMOUNT FOR FY 2013: $6,936,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $4,033,000 O: $4,084,000 T: $8,117,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $1,694,000 will be used for critical caretaker operation and maintenance of the lock and spillway.

FRM: N/A

RC: $1,388,000 will be used for operation and maintenance of recreational facilities including campgrounds, day use areas, and boat ramps, replacement, upgrade and renovation of recreational facilities to comply with state health codes and Americans with Disabilities Act requirements.

H: $4,640,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water. Routine preventive maintenance is critical for meeting performance goals and providing peaking power with limited forced outages.

EN: $395,000 will be used for operation, management and protection of existing soil, water, vegetation, forest, fish & wildlife, cultural resources, coordination for federally listed threatened and endangered species and implementation of invasive species management. Hydrilla currently covers 16,000 acres of project waters, degrading habitats and impairing navigation and operation of the powerhouse and recreation structures.

WS: N/A

OTHER INFORMATION: Lake Seminole is routinely listed as one of the top ten fishing lakes in outdoor magazines.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Manatee Harbor, FL

AUTHORIZATION: P.L.99-662, WRDA 1986, Sec. 202; PL 101-640, WRDA 1990,Florida; PL 108-137, Energy & Water, (section 157)

LOCATION AND DESCRIPTION: The project is located on the Gulf coast of Florida, just south of Tampa. The project provides for federal maintenance of an existing 40-foot deep by 400-foot wide entrance channel and basin, construction of wideners at the northwest end of the entrance channel, and enlarging the turning basin to 900 feet in diameter. The entrance channel extends approximately 3 miles in length from the turning basin to its intersection with the Tampa Harbor Main channel.

CONFERENCE AMOUNT FOR FY 2013: $0 2/
BUDGETED AMOUNT FOR FY 2014: M: $3,165,000 O: $200,000 T: $3,365,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $3,365,000 provides funding for maintenance dredging associated with the critical shoaling that is occuring within the entrance channel to the port facility. It also provides for the required condition surveys that will communicate the issues to the harbor pilots.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 3,197,000 tons of cargo pass through Manatee Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Miami Harbor, FL

AUTHORIZATION: River and Harbor Act of 1960; Section 1001(17) of the Water Resources Development Act of 2007 (P.L. 110-114)

LOCATION AND DESCRIPTION: The project is located in Miami-Dade County on the lower east coast of Florida. The authorized project includes Cut-1 and Cut-2 depth of 52 feet plus one foot allowable overdepth, including a widener at the outer portion of Cut-1 of 800 feet in width; Cut-3 depth of 50 feet plus one foot allowable overdepth, including a turn widener at the intersection of Cut-3 and the Fisher Island Turning Basin; Fisher Island Turning Basin depth of 50 feet plus one foot allowable overdepth; Fisherman's Channel depth of 50 feet plus one foot allowable overdepth, channel width of 440 feet; Lummus Island Turning Basin depth of 50 feet plus one foot allowable overdepth; Cut 4 (Main Channel) and Main Turning Basin depth of 36 feet plus one foot allowable overdepth; and Dodge Island Channel depth of 34 feet plus one foot allowable overdepth.

CONFERENCE AMOUNT FOR FY 2013: $4,334,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $4,355,000 O: $0 T: $4,355,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $4,355,000 - Work includes removal of shoaled material above existing channel depth in Cuts 1 and 2, Fisherman's Channel and Lummus Island Turning Basin. This maintenance dredging must be removed in conjunction with the Deepening and Widening Phase III construction contract.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 7,156,000 tons of cargo pass Miami Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Okeechobee Waterway (OWW), FL

AUTHORIZATION: 1945 River and Harbor Act, 1960 River and Harbor Act

LOCATION AND DESCRIPTION: The project provides a 155-mile long channel across the state from Fort Myers to Stuart. Maintained depth ranges from 8 feet to 10 feet. The waterway runs through Lake Okeechobee and consists of the Caloosahatchee River on the west side of the lake and the St. Lucie Canal on the east side. Included in the project are navigation locks at Ortona, Moore Haven, and St. Lucie. Additional locks at W. P. Franklin and Port Mayaca authorized under the Central and Southern Florida Project are also located within the waterway. Each lock also provides recreational facilities for public use year round. The waterway serves navigation, as well as flood control, since release of excess water from Lake Okeechobee can be made into the St. Lucie Canal and the Caloosahatchee River.

CONFERENCE AMOUNT FOR FY 2013: $3,000,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $104,000 O: $2,363,000 T: $2,467,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:
N: $1,375,000 will provide for annual operation of St. Lucie, Moore Haven and Ortona locks, including minimal labor, facilities security and contract support. The Okeechobee Waterway is a heavily used waterway primarily used for recreation and commercial navigation, including tug/barge combinations and commercial fishing vessels. The average annual National Economic Development (NED) impact to navigation and recreation of the Okeechobee Waterway is over $22,000,000.
FRM: N/A
RC: $711,000 will provide for minimal operation and maintenance of vistor and recreation facilities. With an annual visitation estimated at approximately 6 million and NED value of over $55,000,000 annually, the OWW is a valuable resource to the south Florida area and the nation. The Corps manages 10 recreation areas along the OWW, encompassing 394 acres and offering 122 campsites, 5 boat ramps, 3 visitor centers, one swim beach, 112 miles of trails, 6 reservable picnic shelters, playgrounds, fishing piers, and other amenities. Lake Okeechobee has an excellent reputation for fishing and hosts more than 500 fishing tournaments each year. Visitation in FY08 totaled 6.2 million with $384,000 in user fee revenues and $392,000 in volunteer services provided.
H: N/A
EN: $381,000 will be used to manage habitat, fire, wildlife, fisheries, aquatic plants, endangered and protected species, control encroachments, provide shoreline management, boundary line surveillance, and cultural resources protection on OWW Project lands and waters. Priority work includes management of special status species, invasive species control, and shoreline/encroachment management.
WS: N/A

OTHER INFORMATION: There are currently six special status species with Fish and Wildlife Service Recovery Plans inhabiting project lands and waters. These include manatee, Everglades's snail kite, Okeechobee gourd, Eastern Indigo snake, crested caracara, and the wood stork. The waters and lands of the OWW project are infested with invasive species. Target species for removal include Brazilian pepper, Australian pine, air potato, Melaleuca, water hyacinth, water lettuce, alligator weed, cogon grass, sailfin catfish, fire ant, wild boar, and giant apple snail. The OWW and Central &South Florida projects contain 402 miles of shoreline and 654 miles of boundary. There are currently approximately 400 active permits.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Palm Beach Harbor, FL

AUTHORIZATION: River and Harbor Act of 1960

LOCATION AND DESCRIPTION: The project is located in Palm Beach County on the lower east coast of Florida. Palm Beach Harbor provides an entrance channel 35 feet deep, 400 feet wide, and 0.8 miles long, merging with an inner channel 33 feet deep, 300 feet wide, and 0.3 miles long, then flaring into a turning basin with a 1,200 foot turning diameter, and jetties on the north and south sides of the inlet. Length of project is about 1.6 miles.

CONFERENCE AMOUNT FOR FY 2013: $2,500,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $2,300,000 O: $200,000 T: $2,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $2,500,000 - Maintenance dredging contract will be scoped to comply with Fiscal Year 2014 budget amount. The contract will require dredging of the most critically shoaled area of the 1.6 mile waterway, with particular emphasis on the entrance channel. Also design efforts for the FY 2015 event will be performed during FY 2014.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: With the first winter storm, the project will lose three feet or more of channel depth, resulting in significant light loading of foreign and domestic shipments of fresh produce and goods. Federal channel also provides access for fuel oil to South Florida power plants. Over 1,863,000 tons of cargo navigate the Palm Beach Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Panama City Harbor, FL

AUTHORIZATION: River and Harbor Act of 30 June 1948 and previous acts. Rehabilitation of the jetties was authorized by the Chief of Engineers 6 March 1971.

LOCATION AND DESCRIPTION: Panama City Harbor is located on the northwest coast of Florida. The project consists of 4 channels; an approach channel 450 x 38 feet, an entrance channel 300 x 36 feet, the Watson Bayou Channel 100 x 10 feet and the Grand Lagoon Channel 100 x 8 feet.

CONFERENCE AMOUNT FOR FY 2013: $0 2/
BUDGETED AMOUNT FOR FY 2014: M: $2,033,000 O: $37,000 T: $2,070,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $2,070,000 will be used for dredging the outer channel reaches and dredging surveys. This will improve navigation performance by increasing the availability of channel and reducing the need for light loading or delays awaiting tides to access this moderate use port.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 50% of the tonnage entering this port requires the full project depth. The tonnage through this port has expanded dramatically since the project depth was increased in 2004 and has held steady in spite of the down turn in the economy.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Port Everglades Harbor, FL

AUTHORIZATION: River and Harbor Act of 1960

LOCATION AND DESCRIPTION: The Project is located in Broward County on the lower east coast of Florida. The outer part of the entrance channel is 45 feet deep by 500 feet wide and is 5,100 feet long including a 1,000-foot transition section inside the two jetties. The inner part of the entrance channel is 42 feet deep by 450 feet wide for a length of 4,800 feet through the main turning basin. The main turning basin is 42 feet deep over a rectangular area 1,700 feet by 2,300 feet. The 31-foot deep north turning basin extends 1,100 feet to the north, tapering from 800 to 500 feet at the northern extreme. The south turning basin extends approximately 1,100 feet to the south by 1,260 feet wide, with authorized depths of 31, 36, and 37 feet. The 42-foot deep by 400-foot wide south port channel extends 9,356 feet south from the entrance channel. The turning notch is 42 feet deep by 750 feet by 1,000 feet, adjoining the south port channel from the west approximately 6,500 feet south of the entrance channel. Length of project is approximately 3.5 miles.

CONFERENCE AMOUNT FOR FY 2013: $3,084,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $300,000 O: $0 T: $300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $300,000 – Closeout of 2013 O&M event will be required, including project condition surveys for the channel and the Ocean Dredged Material Disposal Site, United States Geological Survey/United States Navy/Sponsor coordination, and permit required monitoring.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 20,878,000 tons of cargo navigate Port Everglades Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Removal of Aquatic Growth, FL

AUTHORIZATION: River and Harbor Act of 1899, as amended

LOCATION AND DESCRIPTION: This project provides annual mission essential prevention, control and removal of nuisance aquatic vegetation impacting, obstructing or threatening navigation in the Federal navigation channels of the St. Johns, Kissimmee, Withlachoochee, Ocklawaha and Crystal Rivers in addition to the Okeechobee Waterway projects. This includes approximately 600 miles of channel with 650,000 surface acres. Operational priority is given to controlling floating nuisance vegetation in order to keep the principal navigable waterways and locks open for navigation. Additionally, this vegetation displaces native species, changing community structure and altering ecological functions potentially impacting threatened and endangered species including the Everglades Snail Kite, Okeechobee gourd and the wood stork. These invasive species also interfere with operations and maintenance to levees and canals and compromise the integrity of the navigation and flood control structures.

CONFERENCE AMOUNT FOR FY 2013: $3,250,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $3,500,000 O: $0 T: $3,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $3,500,000 - The projects consist of maintenance control operations to control vegetation in the St. Johns, Kissimmee, Withlachoochee, Crystal and Ocklawaha Rivers in addition to the Okeechobee Waterway and Lake Okeechobee. Maintenance control is defined as keeping target vegetation at the lowest feasible levels to protect navigation interests. Anticipate controlling approximately 15,000 – 17,000 acres of vegetation in FY 2014. In addition, the USACE will conduct educational outreach activities for our customers, conduct pre- and post-treatment surveys to ensure safety of our staff and the public and conduct an environmentally compatible program.

The primary purpose of these operations is to control floating nuisance vegetation in order to keep the principal navigable waterways and locks open for navigation in the listed Federal Navigation projects.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Coordination between the Corps and other Federal, state, and local agencies is conducted on a continual basis. The Florida Wildlife and Conservation Commission is the principal state agency involved in project coordination.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Scheduling of Reservoir Operations, FL

AUTHORIZATION: River and Harbor Act of 1960

LOCATION AND DESCRIPTION: The project provides required water management oversight and monitoring of water control plans located in Central & Southern Florida to achieve maximum benefits.

CONFERENCE AMOUNT FOR 2013: $22,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $0 O: $35,000 T: $35,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $35,000 Funding is utilized to support labor needed to coordinate with Sponsor on water related management activities to achieve maximum benefits on monitoring of water control plans.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: South Florida Ecosystem Restoration (SFER), Florida

AUTHORIZATION: The SFER Operations & Maintenance (O&M) program is comprised of the Central & Southern Florida (C&SF) project, the US DOI Modified Water Deliveries to Everglades National Park, Florida (MWD) project and the Everglades & South Florida (E&SF) Seminole Big Cypress project.
-C&SF (includes the Comprehensive Everglades Restoration Plan – CERP) Authorization for O&M was contained in WRDA 2000 (Public Law 106-543), Section 601 (e) (4).
-MWD was authorized under Public Law (P.L.) 101-229 of the 1989 Everglades National Park Protection and Expansion Act. P.L. 108-7 was passed in 2003. P.L. 111-8 was passed in March 2009.
-E&SF: Seminole Big Cypress Reservation Water Conservation Plan (part of the Critical Projects, Florida) Authorization for O&M was contained in WRDA 2000 (Public Law 106-543), Section 601 (e) (4).

LOCATION AND DESCRIPTION: The South Florida Ecosystem Restoration Program stretches from the southern Orlando area southward across the Everglades, the Florida Keys, the contiguous and near-shore waters of South Florida, and across South Florida from east to west including portions of the drainage areas of the Indian River Lagoon and the Caloosahatchee River, as well as population centers along the southeast and southwest coasts. The project area is defined by the political boundaries of the Southwest Florida Water Management District, and includes all of the Everglades. It encompasses an area of approximately 18,000 square miles, which includes all or part of 18 counties in the southeast part of the State of Florida.

CONFERENCE AMOUNT FOR FY 2013: $7,783,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $5,258,000 **O:** $3,795,000 **T:** $ 9,053,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: $9,053,000 will provide annual water management operation of project features, critical management/maintenance of hydrological and meteorological operations, streamgaging oversight of the entire program for use in annual water management operations; O&M for Seminole Big Cypress; MWD; CERP: Melaleuca Eradication; CERP: Picayune Strand Restoration Merritt Pump Station; Manatee Pass Gates and the C&SF: C-111 South Dade County projects.

WS: N/A

OTHER INFORMATION: The budget requested for FY 2014 is $1,270,000 more than the President's budget for FY 2013 due increased costs for reimbursement on the C&SF: C-111 South Dade project associated with the S-332 pump stations and the completion of the E&SF: Seminole Big Cypress Basin 4 feature, and the C&SF: CERP: Picayune Strand Restoration Merritt Pump Station.

1/ Estimated Unobligated "Carry-In" Funding: As of date this justification was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Tampa Harbor, FL

AUTHORIZATION: HR 91-401 91 2; (Pages 10 & 11 of 88 Page Report); Energy and Water Act November 7, 2003, Report No. 108-357

LOCATION AND DESCRIPTION: The total project consists of a channel from the Gulf of Mexico to Port Tampa and Tampa. Project features include the entrance channel from the Gulf of Mexico to Hillsborough Bay. At Hillsborough Bay, the channel splits into two legs, with one continuing west to Port Tampa and the other east to Gadsden Point. The west channel continues to Port Tampa and ends in a turning basin. The west channel to Gadsden Point includes the Alafia River, Port Sutton, East Bay, and Seddon Channels. The project depth varies from 45 feet in the entrance channel at the Egmont Bar Channel to 30 feet in the Alafia River. Length of project is about 67 miles including 3.6 miles in the Alafia River. The Port of Tampa has more cargo tonnage than all other Florida ports combined.

CONFERENCE AMOUNT FOR FY 2013: $8,150,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $9,750,000 O: $650,000 T: $10,400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $10,400,000 - The contract will require dredging of the most critically shoaled areas with particular emphasis on the Entrance Channel including Egmont Cut 1 & 2 and Mullet Key Cut. These funds would improve navigation performance by increasing the availability and reliability of the channel through maintenance dredging.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 32,390,000 tons of cargo enter Tampa Harbor on an annual basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Georgia

O&M Justification Sheet

PROJECT NAME: Allatoona Lake, GA

AUTHORIZATION: Flood Control Acts of 18 August 1941 and 22 December 1944. Recreation facilities were authorized by Section 4 of the Flood Control Act of 22 December 1944.

LOCATION AND DESCRIPTION: This 37,000 acre multi-purpose flood risk management project is located on the Etowah River, a segment of the Alabama-Coosa-Tallapoosa (ACT) Rivers System, 48 miles above Rome, Georgia. The project includes a dam, hydroelectric powerhouse, gated spillway, a reservoir, 23 Corps of Engineers recreation areas and 54 non-federal recreation areas. The lake supports over 6 million visitors per year with over 90 million visitor-hours of recreation annually and is an important source of storage for the Atlanta Metropolitan Area's water supply.

CONFERENCE AMOUNT FOR FY 2013: $7,301,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $2,931,000 O: $5,234,000 T: $8,165,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $524,000 will be used for activities related to the controlled release and storage of water, including the collection of water management data and dam safety activities.

RC: $3,205,000 will be used for the annual operation and maintenance of several recreational areas and rehabilitation or upgrade of various recreational facilities.

H: $3,616,000 will be used for the annual maintenance of the structure and equipment associated with the controlled release and storage of water and includes funds for annual maintenance and repair of project security system. Funds will also be used for the collection of water management data and dam safety activities.

EN: $820,000 will be used for natural resources management, shoreline management, water quality monitoring, and NEPA compliance surveys.

WS: N/A

OTHER INFORMATION: This project is located within the ACT Rivers System and 33 miles north of Atlanta, GA. This is one of Corps of Engineer's most highly visited recreational projects and provides hydropower marketed by the Southwestern Power Administration.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Apalachicola, Chattahoochee and Flint Rivers (ACF), GA, AL & FL

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, modified by WRDA 1986

LOCATION AND DESCRIPTION: The project is located in southeast Alabama, southwest Georgia and northwest Florida. The project includes a 9 X 100 foot navigation channel in the Apalachicola River in Florida, a 3 X 100 foot channel in the Flint River in Georgia to the City of Bainbridge, and a 9 X 100 foot navigation channel on the Chattahoochee River in Alabama and Georgia to Columbus, Georgia. The project includes George W. Andrews Lock on the Chattahoochee River in Early County, Georgia.

CONFERENCE AMOUNT FOR FY 2013: $2,085,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $65,000 O: $1,259,000 T: $1,324,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $400,000 will be used for caretaker operation of water management structures including the operation of the spillway gates.

FRM: $136,000 will be used for the mandated revision of the ACF Water Control Manuals.

RC: $123,000 will be used for caretaker operation of the recreational facilities to accommodate visitation.

H: $489,000 will be used for the mandated revision of the ACF Water Control Manuals.

EN: $176,000 will be used for the ranger staff, management of forestry and wildlife activities, property line surveys, and other cultural and natural resources activities.

WS: N/A

OTHER INFORMATION: This project has been designated as a low-use navigation waterway. There are several threatened and endangered species in the lower part of the system.

There is a legal mandate to update the ACF water control manual which is funded under this project.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Atlantic Intracoastal Waterway, GA

AUTHORIZATION: Multiple Rivers and Harbors Acts, Beginning 1880, latest P.L. 14 dated March 2, 1945

LOCATION AND DESCRIPTION: The Savannah District's portion of the Atlantic Intracoastal Waterway (AIWW) consists of 161 miles of shallow draft channel from Port Royal Sound, SC to Cumberland Sound, FL. The authorized depth of the project is -12 feet below mean low water (MLW). The purpose of the project is to provide safe and economical movement of goods between major deep draft ports that cannot be moved via highway or rail. The current controlling depth of the project is -2 feet below MLW. The project was last dredged in FY 2009.

CONFERENCE AMOUNT FOR FY 2013: $0 2/
BUDGETED AMOUNT FOR FY 2014: M: $0 O: $164,000 T: $164,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $164,000 will be used to perform condition surveys and other critical caretaker activities.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Lack of adequate confined upland disposal area capacity has limited dredging to only certain reaches. Current traffic relies on accurate surveys and the tides in order to utilize the AIWW. Changes to the Georgia Coastal Zone Management (CZM) plan may require changes to dredge material placement when dredged material is more than 88% sand. The District is updating the project's Environmental Impact Statement and Dredged Material Management Plan to be prepared when maintenance funds become available.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $80,000. This amount will be used to perform work on the FY2014 project as follows: to complete the planning reviews of the Dredged Material Management Plan and Environmental Impact Statement, and to process and route the Record of Decision.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Brunswick Harbor, GA

AUTHORIZATION: PL 108-07 WRDA 99

LOCATION AND DESCRIPTION: Brunswick Harbor is a deep-water port with project dimensions of 38 feet deep by 500 feet wide in the bar channel and 36 feet deep by 400 feet wide in the inner channels through St. Simon's Sound, Brunswick River and East River. The inner harbor is maintained through use of Andrews Island, the sole upland disposal area. The inner harbor has two turning basins, one in East River and the other in Turtle River. Terry Creek is an inactive dredged material containment area near Brunswick, Georgia contaminated by toxaphene, on which the Environmental Protection Agency (EPA), Hercules, Inc., and Savannah District are working to resolve concerns over possible environmental impacts. Monthly controlling depth surveys are performed along the entire length of the harbor to monitor harbor sedimentation.

CONFERENCE AMOUNT FOR FY 2013: $3,000,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $ 5,121,000 O: $ 190,000 T: $5,311,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $5,311,000 provides for minimal operation and maintenance for dredging, environmental monitoring, water quality monitoring, condition surveys, dredge management containment areas and real estate activities. This results in maintenance dredging of only the most critical shoals in the shipping channel, yielding a 500 feet wide and 34 feet deep entrance channel and a 400 feet wide and 32 feet deep inner channel. The channel now only allows for one-way passage of ships, and requires vessels to light load.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Environmental constraints limit USACE's ability to fully maintain the harbor because of reduced time windows and higher dredging costs. Ocean-going hopper dredge operations are restricted to 15 December to 31 March by the presence of threatened and endangered sea turtles. In addition, the dredges' sailing speed is restricted when right whales are spotted within ten miles of the project. Monthly controlling depth surveys are conducted to provide timely and useful information to mariners concerning shoaling. Primary commodities transported through Brunswick Harbor are coal, petroleum and its products, chemicals and related products, crude materials, manufactured goods and equipment, and farm products, totaling about 2,500,000 tons annually. Brunswick Harbor is the 3rd largest roll on-roll off auto handling port in the nation. The port generates $44,460,000 in port business with $217,000,000 annually in duty taxes and supports 98,000 jobs.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the FY 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Buford Dam and Lake Sidney Lanier, GA

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, as amended

LOCATION AND DESCRIPTION: The project is located approximately 40 miles north of Atlanta, GA on the Chattahoochee River in Gwinnett, Hall, Dawson, Lumpkin and Forsyth Counties. The project includes a hydroelectric powerhouse, a 39,000 acre flood risk management reservoir with 692 miles of shoreline, and 83 recreation facilities. The project is a three-time winner of the Corps "Project of the Year Award" and leads the nation in user fees. Local Chamber of Commerce data shows Lake Lanier has a $5.5 billion annual economic impact. Last year the project totaled over 7.1 million in visitation.

CONFERENCE AMOUNT FOR FY 2013: $8,611,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $2,984,000 O: $5,987,000 T: $8,971,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $59,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water.

FRM: $593,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water and dam safety activities. Approximately $2,000,000,000 plus worth of property is located in the floodplain between Buford and Peachtree Creek. The project is essential to the protection of property in the metropolitan Atlanta area.

RC: $3,390,000 will be used for operation and maintenance of recreational facilities including campgrounds, day use areas, and boat ramps. This project is one of the most visited Corps of Engineers projects in the United States. Numerous local businesses and jobs depend on the recreational visitation to the lake for their livelihood.

H: $3,797,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water. Routine preventive maintenance is critical for meeting performance goals and providing peaking power with limited forced outages. The capability and reliability is essential in maintaining frequency on the power grid.

EN: $1,132,000 will be used for stewardship of fee owned acreage, natural resources management, water quality protection, and protection of federally listed threatened and endangered species. The Shoreline Management Program is one of the largest in the country with over 10,000 permits issued. Effective management of this program is essential in maintaining a balance between adjacent land owners, public use, and the natural riparian ecosystems around the lake.

WS: N/A

OTHER INFORMATION: This is one of the most highly visited Corps of Engineers projects in the United States, is currently the main source of drinking water for the Atlanta Metropolitan area and provides peak power marketed by the Southeastern Power Administration. This project has high visibility among the public and local, state and federal agencies.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Carters Dam and Lake, GA

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, as amended

LOCATION AND DESCRIPTION: This 8,577 acre project is located on the Coosawattee River, a portion of the Alabama-Coosa-Tallapoosa (ACT) River System, 26.8 miles above the mouth of the river, near Chatsworth, Georgia. The project includes a dam, hydroelectric powerhouse (master plant that also controls Allatoona and Buford), a flood risk management reservoir and 10 recreational areas.

CONFERENCE AMOUNT FOR FY 2013: $7,999,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $4,621,000 O: $3,507,000 T: $8,128,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $658,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water and for dam safety activities.

RC: $1,375,000 will be used for operation and maintenance of recreational facilities including campgrounds, day use areas, swim beaches, boat launching ramps, and fishing areas.

H: $5,907,000 will be used for operation and maintenance of structures and equipment associated with the controlled release and storage of water. Routine preventive maintenance is critical for meeting performance goals and providing peak power with limited forced outages.

EN: $188,000 will be used for stewardship of project natural resources, updating master plan, management of wildlife habitat, monitoring and managing forest resources, and monitoring and resolving encroachments.

WS: N/A

OTHER INFORMATION: The Carters project includes a main dam and a reregulation dam. Two of the four generators can be reversed and utilized as pumps. These two units are used to pump water back to the main reservoir during non peak generation hours for reuse during peaking hours.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Hartwell Lake, GA and SC

AUTHORIZATION: Flood Control Act 1950 and 1958; Water Resources Development Act 1976

LOCATION AND DESCRIPTION: The Project is located midway between Atlanta, GA and Charlotte, NC. The dam is a concrete gravity type, 1900 feet long and 204 feet high with a 568-foot controlled spillway. The Project provides 2,800,000 acre feet of storage with 1,400,000 allocated to hydropower, 293,000 to flood control and 1,100,000 acre feet to inactive storage. The project also boasts 962 miles of shoreline, 56,000 acres of water, and 23,500 acres of land.

CONFERENCE AMOUNT FOR FY 2013: $9,903,000 2/
BUDGETED AMONT FOR PY: M: $2,907,000 O: $7,821,000 T: $10,728,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $18,000 provides routine operation and maintenance for joint costs, including water management, and USGS gaging, under the navigation business line.
FRM: $492,000 provides routine O&M of the project flood risk management infrastructure; annual O&M of the Clemson Pumping Station, earthen and concrete dam, spillway and auxillary equipment; and all Dam Safety instrumentation, engineering analysis and dam failure emergency planning.
RC: $4,078,000 provides for minimal operation and maintenance of recreation areas with reduced levels of service, reduced recreation seasons and partial closures. Includes funding for O&M Ranger staff, administration, water safety, district recreation and real estate support. Recreation funding provides for contracts enabling operations, maintenance and law enforcement of 50 campgrounds, day use parks and access areas.
H: $5,067,000 provides routine O&M of hydropower function, including funding for O&M powerplant staff, administration, field engineering, replacement parts and funding needed to comply with North American Electric Reliability Corporation's (NERC) reliability standards. O&M activities are critical to limiting forced outages to 2%, maximizing peak unit availability, and providing reliable energy to the Southeastern Power Administration's federal power customers.
EN: $1,031,000 provides administration of the Corps' largest shoreline management program including 11,000 dock permits (these permits comprise over 25% of the permits in the nation), minimal O&M of the environmental stewardship aspects of the project to keep it healthy and sustainable, environmental compliance, and fishery and wildlife management.
WS: $42,000 Manage three existing water supply agreements, including billing users; process requests for allocation increases in two of these existing contracts; negotiate two new water supply contracts to also include permitting of new intake/outfall lines.

OTHER INFORMATION: Hartwell is one of the most visited projects in the nation. The project served 9,353,000 visitors in FY 2012, resulting in $273,295,000 in visitor spending within 30 miles of the project and $946,000 in revenues returned to the treasury. The Hartwell Power Plant produced 291,000 MWH in FY 2012, with $21,694,000 returned to the treasury. Total cumulative flood damages prevented is $70,074,000.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the FY2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: J. Strom Thurmond (JST) Dam and Lake, GA and SC

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The dam is located 22 miles north of Augusta, GA and consists of a 2,282-foot long, 200-foot high concrete section and a controlled spillway 1,096 feet long. It provides a total storage of 2,900,000 acre-feet, of which 390,000 acre-feet are for flow regulation to benefit navigation below Augusta and for hydropower. The multi-purpose project's 80,000 acres of land, 70,000 acres of water, and 1,200 miles of shoreline inhabit seven counties in Georgia and South Carolina. Thurmond is the largest Corps project constructed east of the Mississippi and is one of the ten most visited projects in the nation.

CONFERENCE AMOUNT FOR FY 2013: $9,546,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $2,881,000 O: $7,058,000 T: $ 9,939,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $34,000 provides routine operation and maintenance for joint costs, including water management, and U.S. Geological Survery (USGS) gaging, under the navigation business line.
FRM: $362,000 provides for instrumentation for Engineering Analysis (seismic, non-seismic, and structural), an Emergency Action Plan update and Dam Safety Assurance Studies, including updating inundation maps ($331,000); and routine operation and maintenance for joint costs under the flood risk management business line ($31,000). Average annual benefits are $2,082,000 in flood damages prevented.
RC: $3,295,000 provides minimal routine service levels and short seasons to 34 recreational areas, with potential for 2 major areas to be closed or out granted, Ranger staffing, administration, a small water safety campaign, and contracts for O&M services in Corps operated areas.
H: $4,959,000 provides minimal routine O&M of the hydropower plant, staffing, field engineering, some replacement parts, and compliance with the North American Electric Reliability Corporation's reliability standards. O&M activities are critical to limiting forced outages to 2%, maximizing peak unit availability, and providing reliable energy to Southeastern Power Administration's power customers.
EN: $1,246,000 will be used to manage 150,000 acres of natural resources in accordance with the National Environmental Policy Act and Engineering Regulations 1130-2-540 and 405-1-12, resolve 5 encroachments on Corps-owned property, conduct cultural resource clearances, monitor Best Management Practices and evaluate areas of possible erosion, manage 40% of the shoreline management program including 2803 shoreline permits along 1200 miles of shoreline, perform environmental inspections and endangered species clearances in outgrant areas, treat 70 acres of invasive aquatic vegetation, process outgrant requests, and maintain the project boundary line.
WS: $43,000 provides for management of seven existing water supply agreements.

OTHER INFORMATION: Thurmond Power Plant has seven 52,000kw units (364,000kw installed capacity) and has one of the highest unit availability rates in the Corps. The project served 5,042,000 visitors in FY 2012, resulting in $134,714,000 in visitor spending within 30 miles of the project and $875,000 in revenues. The J. Strom Thurmond Power Plant produced 328,000 mega watt hours in FY 2012, returning $10,530,000 in revenues to the General Treasury through the Southeastern Power Administration. J. Strom Thurmond prevented an estimated $116,577,000 in cumulative flood damages.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Richard B. Russell (RBR) Dam and Lake, GA & SC

AUTHORIZATION: Flood Control Act of 1950 and 1958; WRDA 1976

LOCATION AND DESCRIPTION: The dam is located on the Savannah River, near Calhoun Falls, SC, and is 59 miles north of Augusta, GA. The dam has a concrete section 1,884 feet long with a maximum height of 210 feet and a controlled spillway 590 feet long. It provides approximately 1,166,200 acre-feet of storage, of which 126,800 acre-feet are allocated for hydropower, 140,000 for flood control, and 899,400 for inactive storage. There are 542 miles of shoreline, 26,650 acres of water, and 26,500 acres of public land. The Richard B. Russell multi-purpose project is one of only two major hydropower projects in the Corps of Engineers with pump-back capability.

CONFERENCE AMOUNT FOR FY 2013: $8,488,000 /2
BUDGETED AMOUNT FOR FY 2014: M: $ 4,143,000 O: $4,564,000 T: $8,707,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A
FRM: $333,000 provides for ongoing maintenance and repair of 10 flood control gates, instrumentation for Engineering Analysis (seismic, non-seismic, and structural), a bi-annual exercise on Dam Failure Emergency Planning, an after Action Report and an Emergency Action Plan update.
RC: $379,000 provides minimal O&M for partnership activities, water safety and coordination of recreation services with cost-share sponsors.
H: $7,068,000 provides for minimal critical routine O&M of the hydropower plant, including funding for O&M staff, field engineering, and compliance with North American Electric Reliability Corporation's reliability standards. Funding also provides liquid oxygen supplies for the Russell and Thurmond dissolved oxygenation systems sufficient for average water flow years, and provides materials, supplies and O&M activities that are critical to limiting forced outages to 2%, maximizing peak unit availability, and providing reliable energy to the Southeastern Power Administration's federal power customers.
EN: $885,000 will provide for 49,236 acres of mitigation authorized by WRDA 1986. $324,000 is for mitigation collar lands around Russell; $336,000 will provide mitigation payment to Georgia Department of Natural Resources (GADNR); $83,000 supports mitigation payment to South Carolina Department of Natural Resources (SCDNR); and $142,000 supports trout mitigation payment to SCDNR.
WS: $42,000 will be utilized to manage ten existing water supply agreements and to bill users.

OTHER INFORMATION: The Thurmond Project Oxygen System was constructed and officially turned over for full operation in FY 2012 as an environmental feature of Russell Pump-Back operations, and annual oxygen supplies are a direct increase to annual operating costs. The Richard B. Russell Power Plant produced 639,000 mega watt hours (MWH) in FY 2012, also pumping 487,000 MWH, returning $54,812,000 to the treasury. The project served 908,000 visitors in FY 2012, resulting in $28,832,000 in visitor spending within 30 miles of the project. Richard B. Russell prevented an estimated $23,917,000 in cumulative flood damages.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Savannah Harbor, GA

AUTHORIZATION: Water Resource Development Act (WRDA) 92, Sec.101 (10), Oct 31, 1992

LOCATION AND DESCRIPTION: The deep draft navigation project is the border between Georgia and South Carolina and consists of a bar channel 11.5 miles long, 44 feet deep and 600 feet wide, an inner harbor channel 21 miles long, 42 feet deep and 500 feet wide. The inner harbor has six turning basins and an inactivated tide gate structure adjacent to a sediment basin. Kings Island Turning Basin is the primary turning basin adjacent to the Georgia Port Authority docks. There are eight active, upland dredged material disposal facilities, and one off-shore dredged material disposal facility used for harbor maintenance.

CONFERENCE AMOUNT FOR FY 2013: $22,039,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $22,615,000 O: $1,450,000 T: $24,065,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $24,065,000 provides for essential operational activities to support maintenance dredging of the bar channel, inner harbor channel and all turning basins to authorized project depths and widths. Work includes hydrographic surveys, O&M of dredged material disposal, environmental monitoring and real estate activities. These funded activities will result in a safe and reliable channel for shipping/port interests, meet navigation performance measures and associated environmental requirements.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The port is the 4th largest container port in the U.S. and the fastest growing container port in the Nation. Chatham County industries did $1,740,000,000 in port business in 2011 and 37,319 jobs in Chatham County are tied to port activities. Savannah Harbor is the rapid deployment Port of Embarkation for the 3rd Infantry Division and other elements of the 18th Airborne Corps. Ocean-going hopper dredge operations are restricted to December through March due to threatened and endangered sea turtles with sailing speed restricted when right whales are spotted within ten miles of the project.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ There was no Conference Amount available at the time this J-sheet was prepared. The amount shown is the President's budget amount for FY2013.

O&M Justification Sheet

PROJECT NAME: Savannah River below Augusta, GA

AUTHORIZATION: Public Law 70-101

LOCATION AND DESCRIPTION: The project begins upriver of Savannah Harbor (mile 21.31) and continues to river mile 202.6 at Augusta, GA. The New Savannah Bluff Lock and Dam is located 187 river miles above Savannah Harbor, Georgia and is approximately 13 miles downstream of Augusta, Georgia. The structure's original purpose was to provide for passage of commercial navigation on the Savannah River below Augusta Navigation Project. Commercial navigation through the lock ceased in the early 1980s and the lock is only used intermittently by recreational vessels. Since 1987, the City of Augusta, Georgia has operated the lock under a lease agreement with the Corps of Engineers.

CONFERENCE AMOUNT FOR FY 2013: $90,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $0 O: $ 202,000 T: $ 202,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $55,000 will be used to operate the gates on the spillway portion of the Lock and Dam, which are remotely operated from the J. Strom Thurmond Dam, and to conduct a condition survey of the river.

FRM: $147,000 will be used for instrumentation for Engineering Analysis (seismic, non-seismic and structural), to perform required condition surveys of the lock and dam structure and to perform required water management activities.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The New Savannah Bluff Lock and Dam provides a pool upstream in the Augusta, GA and North Augusta, SC areas for drinking water and industrial uses. The City of Augusta operates the recreation facilities and the navigation lock for recreational traffic and support of annual fish migration. The lock now typically accommodates 25 recreational lockages per year.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: West Point Dam and Lake, GA & AL

AUTHORIZATION: Flood Control Act of 23 October 1963

LOCATION AND DESCRIPTION: The project is located approximately 70 miles southwest of Atlanta, Georgia on the Chattahoochee River in Troup and Heard Counties, Georgia, and Chambers County, Alabama. The project includes a hydroelectric powerhouse, a 26,000-acre flood damage reduction reservoir with over 500 miles of shoreline and 37 recreation facilities.

CONFERENCE AMOUNT FOR FY 2013: $7,613,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $2,975,000 O: $4,543,000 T: $7,518,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $30,000 will be used for the operation and maintenance of structures and equipment associated with the controlled release and storage of water.

FRM: $373,000 will be used for the operation and maintenance of structures and equipment associated with the controlled release and storage of water and dam safety activities.

RC: $3,077,000 will be used for the operation and maintenance of recreational facilities including campgrounds, day use areas, and boat ramps.

H: $3,295,000 will be used for the operation and maintenance of structures and equipment associated with the controlled release and storage of water. Routine preventive maintenance is critical for meeting performance goals and providing peak power with limited forced outages.

EN: $743,000 will be used for environmental stewardship of fee owned acreage, natural resources management, protection of wildlife, and cultural resources activities.

WS: N/A

OTHER INFORMATION: This project is part of the Apalachicola-Chattahoochee-Flint (ACF) river system and has received praise from the public for the recreational opportunities provided at the project and flood risk reduction realized during the heavy rains and floods of 2009.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Mississippi

O&M Justification Sheet

PROJECT NAME: East Fork, Tombigbee River, MS

AUTHORIZATION: Flood Control Acts of 22 June 1936, 28 June 1938 and 18 August 1941

LOCATION AND DESCRIPTION: This 53 mile long flood risk management project is located on the Tombigbee River and its tributaries between the junction of Browns and Mackey's Creeks in Itawamba County, Mississippi to the Monroe County line. This project provides for maintenance of the channel to ensure flood risk management benefits for Itawamba County, conveys water to meet requirements of the US Fish and Wildlife Service for protection of endangered mussels, and ensures the ability to provide water supply for the City of Tupelo, averaging 10 million gallons per day.

CONFERENCE AMOUNT FOR FY 2013: $258,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $215,000 O: $40,000 T: $255,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $255,000 will be used to maintain the East Fork flood risk management project.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project includes overhead clearing and general debris removal from the East Fork of the Tombigbee River and Mackey's Creek in Itawamba County, Mississippi. The clearing and debris removal efforts result in benefits related to flood prevention, municipal water supply and environmental stewardship.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Gulfport Harbor, MS

AUTHORIZATION: The existing project was authorized by the River and Harbor Act of 1930 and modified by the River and Harbor Acts of 1948 and 1958, Supplemental Appropriations Act 1985 and Section 202 of WRDA 1986.

LOCATION AND DESCRIPTION: The navigation project is located in Gulfport, Mississippi, approximately equidistant between New Orleans, Louisiana and Mobile, Alabama. The project consists of a 38 x 300 feet Bar Channel from the Gulf of Mexico across Ship Island Bar into Mississippi Sound, a 36 x 220 feet Sound Channel leading to the Anchorage Basin proper, and an 8 x 100 feet Branch Channel leading to an adjacent small craft harbor. The project supports major import/exports of poultry products, fruit, wood products, metals and minerals for manufacturing processes.

CONFERENCE AMOUNT FOR FY 2013: $0 2/
BUDGETED AMOUNT FOR FY 2014: M: $3,082,000 O: $0 T$3,082,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $3,082,000 will be used for partial maintenance dredging.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project was widened to full authorized dimensions in FY-10. The port has a major expansion in the planning phases.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Okatibbee Lake, MS

AUTHORIZATION: Flood Control Act of 23 October 1962 (H. Doc 549)

LOCATION AND DESCRIPTION: Okatibbee Lake is located seven miles northwest of Meridian, Mississippi, at mile 37.7 on the Okatibbee Creek. The project includes a dam, a flood risk management reservoir and several recreation areas.

CONFERENCE AMOUNT FOR FY 2013: $1,568,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $425,000 O: $1,225,000 T: $1,650,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $881,000 will be used for operation of Okatibbee dam, reservoir, buildings, grounds, utilities, roads, bridges and other facilities and equipment.

RC: $684,000 will be used for operation and maintenance of recreational facilities including campgrounds, day use areas, and fishing areas. Funds will also be used for renovations at some facilities.

H: N/A

EN: $85,000 will be used for wildlife and forestry maintenance.

WS: N/A

OTHER INFORMATION: Okatibbee Lake Project provides flood damage reduction for areas in Lauderdale/Clark Counties to include the Cities of Meridian and Enterprise, Mississippi.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Pascagoula Harbor, MS

AUTHORIZATION: River and Harbor Act 1913, 1915, 1952, 1954, 1958, 1960, 1962 and the Water Resources Development Act of 1986

LOCATION AND DESCRIPTION: The Pascagoula Harbor navigation project is located in Jackson County, MS. The project provides for a 44 x 600 foot channel from the Gulf of Mexico across Ship Island Bar and into Mississippi Sound, a 42 x 350 foot channel in the Sound transitioning to 2 main channels, a 42 x 350 foot channel leading to Bayou Casotte and a 38 x 350 foot channel leading to the Pascagoula River.

CONFERENCE AMOUNT FOR FY 2013: $8,785,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $7,194,000 O: $100,000 T: $7,294,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $7,294,000 will be used for maintenance dredging, surveys, and water quality and endangered species coordination. These funds are necessary to maintain and reestablish project depths that have decreased due to shoaling. This will improve navigation performance by increasing the availability of channel to project depth, thereby eliminating the need for light loading or delays awaiting tides to access a high use port.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project supports a major Gulf refinery (Chevron) and a liquefied natural gas (LNG) plant and numerous major shipbuilding industries. Project costs have escalated in recent years due to increased dredging costs.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

North Carolina

O&M Justification Sheet

PROJECT NAME: Atlantic Intracoastal Waterway, NC

AUTHORIZATION: River and Harbor Acts of 1912, 1927, and 1937, as amended

LOCATION AND DESCRIPTION: The project is located on the east coast of North Carolina and runs from the Commonwealth of Virginia line to Little River, SC, a distance of 308 statute miles. The authorized project provides for a waterway 12 feet deep, with widths varying from 90 feet in land cuts to 300 feet in open waters. The project also includes numerous side channels with varying project dimensions.

CONFERENCE AMOUNT FOR FY 2013: $2,900,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $1,000,000 O: $600,000 T: $1,600,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $1,600,000 provides for hydrographic condition surveys, environmental monitoring and dike improvements to ensure adequate disposal capacity within the high commercial use segment of the Atlantic Intracoastal Waterway (AIWW) in support of the Port of Morehead City (Newport River to the Commonwealth of VA line).

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Results of the January 2007 AIWW Report to the NC Sea Grant, NC Department of Environment and Natural Resources and NC Beach, Inlet and Waterway Association indicates that the project contributes to the state-wide economic output by at least $109,000,000 per year; provides about 1,700 jobs per year with wages and salaries of about $52,000,000 per year. The project also supports the following users: U.S. Coast Guard search and rescue operations, barge traffic supporting intermodal transportation to deep draft ports, military equipment and supply transportation barges and vessels, commercial and recreational vessels, National Oceanic and Atmospheric Administration vessels, and U.S. Army Corps of Engineers vessels. This waterway supports the North Carolina State Ports Authority (bulk-cargo ships) and NUCOR Steel and PCS Phosphate shipments through Morehead City Harbor, NC. This portion of the channel is classified as high use and represents 50 percent of the AIWW within the state of North Carolina.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: B. Everett Jordan Dam and Lake, NC

AUTHORIZATION: Flood Control Act of 1965

LOCATION AND DESCRIPTION: The project is located on the Haw River, in central North Carolina, 4.3 miles above its mouth, and 2.5 miles north of Moncure, NC and provides flood risk management, recreation and other purposes to the public. The project includes an earth dam 1,330 feet long with a maximum height of 112 feet above the streambed; an uncontrolled, unpaved chute spillway; a controlled 19-foot diameter outlet structure; and saddle dikes just beyond the spillway. The reservoir is operated as a unit of a coordinated system for flood risk management in the Cape Fear River basin.

CONFERENCE AMOUNT FOR FY 2013: $1,679,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $112,000 O: $1,535,000 T: $1,647,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,077,000 provides for critical routine annual operation of dam and associated structures, project administration, vehicles, floating plant, heavy equipment rental, water control management, and yard support and supplies. Also provides for critical routine annual maintenance of dam and structures, required maintenance of intake control tower, electric and hydraulic systems, instrumentation, pumps and motors, and shop and maintenance area.

RC: **$**387,000 provides for operation and maintenance of existing recreation facilities to maintain minimum level of service to the visiting public.

H: N/A

EN: **$**183,000 provides for compliance with natural resource mandates, in accordance with the project's operations management plan.

WS: N/A

OTHER INFORMATION: A non-Federal hydropower generating facility is currently operating at this project. Flood damages reduced during fiscal year 2011 were about $22,000 for a cumulative total of about $289,570,000 since the inception of the project in 1983. In fiscal year 2011, the annual visitation to the project was about 976,000 visitors.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Cape Fear River above Wilmington, NC

AUTHORIZATION: River and Harbor Acts of 1910, 1934, 1935, 1937, 1965; and Section 4, Flood Control Act of 1944

LOCATION AND DESCRIPTION: The Cape Fear River above Wilmington project is located in Bladen County in southeastern North Carolina and consists of three federally built and maintained locks and dams. Two of the locks and dams were constructed between 1915 and 1917, while the third was completed in 1935. Today, these locks and dams are in poor structural condition. The locks and dams were constructed to provide a navigable channel for commercial barges from Wilmington to Fayetteville, NC, a distance of about 111 river miles. This project currently has only minor commercial navigation traffic. The grounds at Lock & Dam #2 are being utilized on a quarterly basis by the U.S. Military. The U.S. Navy and the special forces of the U.S. Army utilize the locks and surrounding infrastructure as unique training opportunities. This facilitates necessary riverine training in an environment similar to those found in foreign countries.

CONFERENCE AMOUNT FOR FY 2013: $489,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $41,000 O: $444,000 T: $485,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $300,000 provides for caretaker status activities including anadromous fish lockages and related activities to ensure lock operation, periodic inspections, data gathering and critical maintenance at all three locks.

FRM: N/A

RC: $185,000 provides for operation and maintenance of existing recreation facilities to maintain a minimum level of service to the visiting public.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: An Initial Appraisal report, conducted under the authority of Section 216 of the Flood Control Act of 1970, was approved on 2 July 2009. Subsequent detailed studies under this authority would determine if modifications to this project were advisable due to significantly changed physical or economic conditions. Locks No. 1 and 2 are currently rated as dam safety action classification II structures. Also, a fish passage structure was completed in November 2012 at Lock No. 1 as an approved mitigation measure for deepening the Wilmington Harbor 96 Act Navigation channel project. American Recovery and Reinvestment Act construction funds and State of North Carolina required contributed funds were used to construct this feature in accordance with the Project Cooperation Agreement on the Wilmington Harbor 96 Act Project.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Falls Lake, NC

AUTHORIZATION: Flood Control Act of 1965

LOCATION AND DESCRIPTION: The project is located on the Neuse River about 10 miles north of Raleigh, NC and provides flood risk management, water supply, recreation and other purposes to the public. The project includes an earth dam which is 1,915 feet long with a maximum height of 95 feet above the streambed; an uncontrolled chute spillway 100 feet wide located in the east abutment, and a controlled 17.4-foot diameter outlet structure. This project is operated as part of a coordinated system for flood risk management in the Neuse River Basin.

CONFERENCE AMOUNT FOR FY 2013: $1,782,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $163,000 O: $1,604,000 T: $1,767,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,055,000 provides for critical routine annual operation of dam and associated structures, project administration, vehicles, floating plant, heavy equipment rental, periodic assessment, water control management, and yard support and supplies. Also provides for critical routine annual maintenance of dam and structures, required maintenance of intake control tower, electric and hydraulic systems, instrumentation, pumps and motors, and shop and maintenance area.

RC: $418,000 provides for operation and maintenance of existing recreation facilities to maintain minimum level of service to the visiting public.

H: N/A

EN: $272,000 provides for compliance with natural resource mandates, in accordance with the project's operations management plan.

WS: $22,000 provides for coordination with the City of Raleigh and processing of water supply related revenues and billings.

OTHER INFORMATION: Preliminary permit issued to the City of Raleigh, NC for planning and development of a non-Federal hydropower structure. Dam is currently rated as a dam safety action classification III structure. The City of Raleigh has requested that the project's pool storage allocations be studied to determine if additional capacity could be allocated for the purpose of water supply. Flood damages reduced during fiscal year 2011 were about $456,000 for a cumulative total of about $612,559,000 since the inception of the project in 1983. In fiscal year 2011, the annual visitation to the project was about 1,567,000 visitors.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Manteo (Shallowbag) Bay, NC

AUTHORIZATION: River and Harbor Acts of 1910, 1940, 1950 and 1970; and Section 107 of the 1960 River and Harbor Act, as amended

LOCATION AND DESCRIPTION: The project is located along the outer banks portion of Dare County, North Carolina, between Oregon Inlet, Roanoke Island and Albemarle Sound. The project provides for a channel 14 feet deep and 400 feet wide from the Atlantic Ocean through Oregon Inlet with channels 12 feet deep by 100 feet wide to Pamlico Sound, Wanchese Harbor, Shallowbag Bay Harbor and Albemarle Sound. Length of all channels within the Manteo (Shallowbag) Bay project is approximately 25 miles.

CONFERENCE AMOUNT FOR FY 2013: $1,365, 000 2/
BUDGETED AMOUNT FOR FY 2014: M: $1,200,000 O: $0 T: $1,200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $1,200,000 provides for minimum critical channel maintenance dredging and increased hydrographic surveying of the Oregon Inlet, a critical harbor of refuge.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Council on Environmental Quality (CEQ), the National Oceanic and Atmospheric Administration (NOAA), and the Corps agreed in May 2003 that the proposed jetties on the Oregon Inlet portion of the project would not be constructed and that the channels would be maintained by dredging alone, along with extensive hydrographic surveys providing up-to-date navigation information. Maintenance dredging is essential to support the large commercial fishing fleet ($12,000,000+ value of seafood landings at dockside) traversing to and from Wanchese, NC and the ~600,000 charter and recreational fishing passenger trips. The U. S. Coast Guard utilizes this portion of the project to access the Oregon Inlet Coast Guard Station in support of search and rescue (1,200 missions through Oregon Inlet since 2001) and homeland security. This project provides access to designated harbors of refuge, which is essential during adverse weather conditions since the nearest coastal inlets are Ocracoke Inlet, 90 miles to the south, and Norfolk, VA, 65 miles to the north. Minimal channel maintenance would be performed on a critical need basis.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Masonboro Inlet and Connecting Channels (CC), NC

AUTHORIZATION: River and Harbor Act of 1912, as amended; Section 111, River and Harbor Act of 1968

LOCATION AND DESCRIPTION: The project is located on the southeastern coast of North Carolina in New Hanover County. The authorized project consists of a 14 feet deep by 400 feet wide channel across the ocean bar at Masonboro Inlet, with north and south jetties at the entrance, transitioning to 12 feet deep and 90 feet wide to the Atlantic Intracoastal Waterway at Wrightsville Beach by way of Banks and Motte Channels; a turning basin, 15 feet deep, 300 feet wide, and 700 feet long on the east side of Banks Channel near Masonboro Inlet; and three 15-pile dolphins.

CONFERENCE AMOUNT FOR FY 2013: $0 2/
BUDGETED AMOUNT FOR FY 2014: M: $0 O: $150,000 T: $150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $150,000 provides for hydrographic condition surveys for this critical harbor of refuge project.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project supports the following users: commercial fishing vessels, recreational vessels and the U.S. Coast Guard. The U.S. Coast Guard utilizes this project to perform search and rescue and homeland security missions. This inlet is a critical harbor of refuge providing access during severely adverse weather conditions as it is the only jettied inlet in NC.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Morehead City Harbor, NC

AUTHORIZATION: River and Harbor Acts of 1958 and 1970, and Section 101 of the Water Resources Development Act of 1992

LOCATION AND DESCRIPTION: The Morehead City Harbor project consists of approximately 5 miles of channels, which extend from the deep water in the Atlantic Ocean to the North Carolina State Port at Morehead City, in Carteret County, midway along the North Carolina coastline approximately 10 miles northwest of Cape Lookout. The project consists of a 47-foot deep by 450-foot wide entrance channel from the deep water in the Atlantic Ocean to the Beaufort Inlet Gorge; a channel 45 feet deep by 400 to 600 feet wide from the gorge of Beaufort Inlet to the east facing berthing facilities of the North Carolina State Ports; and a channel and basin 35 feet deep with varying widths to the south and west facing berthing facilities.

CONFERENCE AMOUNT FOR FY 2013: $5,800,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $4,757,000 O: $600,000 T: $5,357,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $5,357,000 provides for project operations and monthly hydrographic surveying and maintenance dredging of the inner harbor portion of this critical harbor of refuge. This will improve navigation performance by increasing the availability, thereby reducing the need for light loading or delays awaiting tides to access a moderate use, strategic terminal.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Morehead City Harbor is a deep draft navigation project with 3,400,000 commercial tonnage valued at $925,000,000 annually. Project is a designated strategic port providing military support to Camp LeJeune (Marine Corps) and provides U. S. Coast Guard vessels access to the Coast Guard base at Ft. Macon. This port supports the North Carolina State Ports Authority (bulk-cargo ships) and NUCOR Steel and PCS Phosphate through connecting channels of the Atlantic Intracoastal Waterway.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Rollinson Channel, NC

AUTHORIZATION: River and Harbor Act of 1935

LOCATION AND DESCRIPTION: The Rollinson Channel project is located in Dare County just inside Hatteras Inlet, NC. The project provides a 12-foot channel from Pamlico Sound to Hatteras Island and a 10-foot deep channel from Hatteras Island to Hatteras Inlet, both with 100-foot channel widths. This project is used by the North Carolina State Ferry System for ferry transportation to Ocracoke Island, which includes a subsistence harbor with no land-based connection. Ocracoke Island relies on ferry transportation for subsistence supplies.

CONFERENCE AMOUNT FOR FY 2013: $50,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $300,000 O: $0 T: $300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $300,000 provides for maintenance dredging of sending terminal for Ocracoke Island ferry and provides access to a subsistence harbor at Ocracoke.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project supports the following users: North Carolina State Ferry System, commercial fishing vessels and recreational vessels; and the U.S. Coast Guard. The U.S. Coast Guard utilizes this project to perform search and rescue and homeland security missions. Minimal maintenance dredging of this subsistence channel will be performed during the fiscal year.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Silver Lake Harbor, NC

AUTHORIZATION: Rivers and Harbor Act of 1930

LOCATION AND DESCRIPTION: The Silver Lake Harbor project is located in Hyde County just inside of Ocracoke Inlet, NC. The project provides a 12-foot channel from deep water in Pamlico Sound to, and including, an anchorage basin of the same depth in Silver Lake Harbor at Ocracoke, with widths of 150 feet across the Big Foot Slough bar and 60 feet in the entrance channel. Silver Lake Harbor is classified as a subsistence harbor, where supplies and personnel can only be delivered to the island via ferry (i.e. there is no vehicle access).

CONFERENCE AMOUNT FOR FY 2013: $300,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $300,000 O: $0 T: $300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $300,000 provides for critical maintenance dredging within the Silver Lake Harbor channel.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project supports the following users: North Carolina Ferry System, commercial fishing vessels and recreational vessels, and the U.S. Coast Guard. The U.S. Coast Guard utilizes this project to perform search and rescue and homeland security missions.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: W. Kerr Scott Dam and Reservoir, NC

AUTHORIZATION: Flood Control Act of 1946

LOCATION AND DESCRIPTION: The project is located on the Yadkin River about 6 miles upstream from Wilkesboro, NC and provides flood risk management, recreation, fish and wildlife conservation, water supply and other benefits to the public. The project includes a rolled earth-fill dam over 1,700 feet long with a maximum height of 148 feet above the streambed and a controlled 12.3-foot diameter outlet structure. An emergency spillway is located near the north abutment of the dam in a rock cut.

CONFERENCE AMOUNT FOR FY 2013: $3,209,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $775,000 O: $2,597,000 T: $3,372,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,362,000 provides for critical routine annual operation of dam and associated structures, project administration, vehicles, floating plant, heavy equipment rental, water control management, and yard support and supplies. Also provides for critical routine annual maintenance of dam and structures, required maintenance of intake control tower, electric and hydraulic system, instrumentation, pumps and motors, and shop and maintenance area.

RC: $1,891,000 provides for operation and maintenance of existing recreation facilities to maintain minimum level of service to the visiting public.

H: N/A

EN: $119,000 provides for compliance with natural resource mandates, in accordance with the project's operations management plan and administration of the project's shoreline management plan.

WS: N/A

OTHER INFORMATION: A non-Federal hydropower structure add-on license has been issued and the Corps is working with licensee on reviewing the preliminary plan. Wilkes County, one of the primary water supply customers, is continuing to pursue construction of a reservoir intake structure. An environmental assessment was completed with a finding of no significant impact. A real estate easement has been issued and Wilkes County continues to pursue local funding to move forward with construction. Flood damages reduced during fiscal year 2011 were about $4,880,000 for a cumulative total of about $208,151,000 since the inception of the project in 1962. In fiscal year 2011, the annual visitation to the project was about 769,000 visitors.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Wilmington Harbor, NC

AUTHORIZATION: River and Harbor Acts of 1930, 1945, 1950, 1962, 1964; Section 107 of the River and Harbor Act of 1960; WRDA 1986 and WRDA 1996

LOCATION AND DESCRIPTION: The project is located on the southeastern coast of North Carolina in Brunswick and New Hanover Counties and provides for a channel 44 feet deep through the Ocean Bar and 42 feet deep to the upper end of the Anchorage Basin at Wilmington. Upstream of this point, the project is 38 feet deep to the Highway 133 bridge; 32 feet deep to the Hilton Railroad Bridge over the Northeast Cape Fear River; and 25 feet deep from the Hilton Railroad Bridge to a point 1-2/3 miles above. The project also includes a northwestward connecting channel, 12 feet deep, from the Atlantic Intracoastal Waterway at Snow's Cut to the main river channel.

CONFERENCE AMOUNT FOR FY 2013: $16,409,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $16,803,000 O: $1,000,000 T: $17,803,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $17,803,000 provides the following operation and maintenance activities: perform Anchorage Basin maintenance dredging with upland disposal to Eagle Island; perform critical Outer Ocean Bar, Inner Ocean Bar and 85% of the Mid-River channel reaches maintenance dredging; conduct project condition surveys; debris removal; mosquito control; and produce plans and specifications for the upcoming FY 2015 maintenance dredging contracts. This will improve navigation performance by increasing the availability of channel, thereby reducing the need for light loading or delays awaiting tides to access a moderate use, strategic terminal.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Waterborne commerce on the existing Wilmington Harbor project was 7.9, 6.9, 6.7 and 8.0 million tons, respectively, for the period 2007-2010. This tonnage does not include the tonnage moved in and out of the Military Ocean Terminal – Sunny Point (MOTSU). The Port of Wilmington handled 204,896 loaded containers in 2008, 194,608 in 2009, 250,048 in 2010, and 290,666 in 2011. Project users include the Transportation Command, MOTSU; North Carolina State Ports Authority; multiple tanker terminals; and the U.S. Coast Guard Cutter, DILIGENCE. A contract is underway to deepen the navigation channel, from the state ports to a point 800 feet below the Highway 17/76 bridge in downtown Wilmington, to the authorized 42 feet. Completion of the contract is anticipated in 2014.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

South Carolina

O&M Justification Sheet

PROJECT NAME: Charleston Harbor, SC

AUTHORIZATION: Multiple River and Harbor Acts. Latest authorization is WRDA 96, P.L. 104-303 Section 101.

LOCATION AND DESCRIPTION: Charleston Harbor is located about midway along South Carolina's Atlantic coastline. This project consists of maintenance of 38.6 miles of channel, three turning basins, and one anchorage basin. The lower harbor requires dredging every year, entrance channel every other year, and the upper harbor approximately every 16 - 18 months. The material removed from the upper harbor is placed in the Clouter Creek Disposal Area, which is approximately 1,475 acres in size.

CONFERENCE AMOUNT FOR FY 2013: $15,883,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $14,311,000 O: $514,000 T: $14,825,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $14,825,000 provides for dredging of the entrance channel and upper harbor, disposal area maintenance, condition surveys of the channel, real estate needs to resolve encroachments, and environmental activities. These funds are necessary to maintain and reestablish project depths that have decreased due to shoaling. This will improve navigation performance by increasing the availability of channel to project depth, thereby eliminating the need for light loading or delays awaiting tides to access a high use, strategic terminal. These funds would ensure adequate disposal area capacity is available to contain the material dredged from the channels in the coming years.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Latest commercial tonnage as reported by the Waterborne Commerce Statistics Center for Fiscal Year 2011 was 17.9 million tons of cargo. The major commodity imported and exported is manufactured equipment and machinery. Per United States Department of Commerce/Bureau of the Census, the 2011 value of waterborne commerce through Charleston was $58.9 billion. Charleston Harbor is listed as one of 17 US strategic ports because of the presence of the Naval Weapons Station, Military Surface Deployment and Distribution Command, Defense Energy Support Center and Army Strategic Logistics Activity Charleston. The harbor generates $45.0 billion annually for the regional economy.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Cooper River, Charleston Harbor, SC

AUTHORIZATION: Section 101 of the River and Harbor Act of 1968 (P.L. 90-483), modified in the Energy and Water Development Appropriations Act, 1992 (P.L. 102-104) and further modified by Section 353, WRDA 99

LOCATION AND DESCRIPTION: The project is located in Charleston and Berkeley Counties. All improvements are in Berkeley County about 45 miles from Charleston. The project includes operation and maintenance of the powerhouse and associated structures and facilities in accordance with our agreement with the South Carolina Public Service Authority (SCPSA). The purpose of the rediversion project was to reduce shoaling in Charleston Harbor by diverting most of the Santee River waters above Pinopolis Dam back into the lower Santee River. Also included in the project authorization was the design and construction of a fish lift as a mitigation feature intended to maintain the number of blueback herring entering the Santee-Cooper Lakes.

CONFERENCE AMOUNT FOR FY 2013: $4,590,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $1,800,000 O: $3,800,000 T: $5,600,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $5,600,000 provides for operation of the powerhouse, natural resource management, condition and operation studies/activities, water quality control, powerhouse maintenance, and maintenance of non-recreation building, grounds and utilities. These funds would improve navigation performance by decreasing shoaling in Charleston Harbor, which is downstream of the project.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project is, in essence, an extension of the Charleston Harbor project. The project was authorized, constructed, and is operated with one purpose - the reduction of siltation in Charleston Harbor. Prior to rediversion, costs for the O&M of Charleston Harbor were threatening the continued viability of the port. That purpose can only be satisfied with the continued operations of the project. Charleston Harbor is listed as one of 17 US strategic ports and the harbor generates $45.0 billion annually for the regional economy. Latest commercial tonnage as reported by the Waterborne Commerce Statistics Center for Fiscal Year 2011 was 17.9 million tons of cargo. The major commodity imported and exported is manufactured equipment and machinery. Per United States Department of Commerce/Bureau of the Census, the 2011 value of waterborne commerce through Charleston was $58.9 billion.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Virginia

O&M Justification Sheet

PROJECT NAME: John H. Kerr Lake, VA & NC

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on the Roanoke River, about 180 river miles above its mouth, in Mecklenburg County, VA and Vance County, NC and provides flood risk management, recreation, hydropower, water supply and other benefits to the public. The project includes a concrete gravity dam with wing and saddle dikes on the right and left banks, with a total length of over 4 miles. The reservoir is operated as a unit of a coordinated system of reservoirs in the Roanoke River basin. The project has installed hydroelectric generating capacity of 268,000 kilowatts.

CONFERENCE AMOUNT FOR FY 2013: $10,174,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $5,414,000 O: $5,481,000 T: $10,895,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,941,000 provides for critical routine maintenance of the flood risk management features of the project to include water management in conformance to water control plans, dam safety activities, critical routine operations of the dam, Island Creek Dam, and wing dike operations within the reservoir, project maintenance, surveillance of wing dikes and piezometer monitoring, rip-rap maintenance, annual maintenance of the structure, equipment and facilities associated with the storage and release of water.

RC: $2,444,000 provides for operation and maintenance of existing recreation facilities to maintain minimum level of service to the visiting public.

H: $5,723,000 provides critical routine operations and maintenance to limit forced outages and maximize peak unit availability, to ensure compliance with the North American Electric Reliability Corporation reliability standards, and provides testing activities and equipment and documentation support.

EN: $762,000 provides for operation, management, and conservation of natural resources through implementation of the environmental operating principles, advance natural resource management programs and shoreline management.

WS: $25,000 provides for coordination with NC and VA officials on water supply withdrawals and processing of water supply related revenues and billings.

OTHER INFORMATION: Island Creek Dam and pumping station is part of this project and is rated as a dam safety action classification III structure. Occurrences of observed seepage at the Island Creek Dam have resulted in implementation of interim measures to minimize the impacts of seepage to this structure. A more permanent measure requiring the installation of a toe drain or grouting curtain is under evaluation. Flood damages reduced during fiscal year 2011 were about $1,232,000 for a cumulative total of about $440,951,000 since the inception of the project in 1952. In fiscal year 2011, the annual visitation to the project was about 1,672,700 visitors.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Philpott Lake, VA

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on the Smith River about 45 miles above its junction with the Dan River in Franklin and Henry Counties, VA and provides flood risk management, recreation, hydropower and other benefits to the public. The project includes a concrete gravity dam about 900 feet long with a maximum height of 220 feet above the streambed. The reservoir is operated as a unit of a coordinated system of reservoirs in the Roanoke River Basin. The project has an installed hydroelectric generating capacity of 14,000 kilowatts.

CONFERENCE AMOUNT FOR FY 2013: $4,834,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $2,110,000 O: $3,080,000 T: $5,190,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,105,000 provides for critical routine operations and maintenance for water management in conformance to water control plans and dam safety activities, and equipment and facilities associated with storage and release of water.

RC: $1,534,000 provides for operation and maintenance of existing recreation facilities to maintain minimum level of service to the visiting public.

H: $2,383,000 provides for critical operations and maintenance to maximize peak unit availability while limiting forced outages to ensure compliance with the North American Electric Reliability Corporation reliability standards.

EN: $168,000 provides for operation, management and conservation of existing vegetation, forests, fish and wildlife and shoreline management.

WS: N/A

OTHER INFORMATION: Dam is currently rated as a dam safety classification III structure. Flood damages reduced during fiscal year 2011 were about $4,824,000 for a cumulative total of about $733,806,000 since the inception of the project in 1952. In fiscal year 2011, the annual visitation to the project was about 703,000 visitors.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

South Pacific Division

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Investigations

California

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
California Coastal Sediment Master Plan	7,300,000	3,224,000	868,000	861,000	900,000 2/	800,000 1/	647,000

Los Angeles District

The study area encompasses the entire California coastline, including the nearshore ocean environment and coastal watersheds. California has approximately 1,100 miles of coastline, of which 86% is actively eroding due to natural and human induced alteration in sediment cycles. Navigation and shoreline structures, along with water control projects, have significantly modified total yield and movement of sediments to and along the coast. The purpose of this study is to develop a comprehensive plan to manage, restore, protect, and preserve sediment resources along the coast of California. The study will evaluate regional alternatives for reducing coastal storm damages; increasing natural sediment supply to the coast through dam removal and other means; restoring aquatic ecosystems; and identifying such potential sediment sources as dredged material from ports and harbors. The Master Plan will provide Federal and non-Federal entities with an adaptive, programmatic road map to plan and program potential future coastal resources projects. The Master Plan will allow these entities to develop water resources projects within a system-oriented context wherein data can be easily shared and technical expertise and tools can be efficiently directed to solve coastal resources problems on a regional basis. A Geographic Information System (GIS)-based decision support system for economic optimization will be developed to assist Federal, State, and local decision makers in identifying, ranking, and selecting projects for program investment that would yield significant regional benefits, relative to costs. Ultimately, the Master Plan will, for significant savings, reduce the number of discrete water resources projects by regionalizing solutions that holistically address individual problem areas. Regionalized projects recommended in the Master Plan will be considered in collaboration with other Federal and non-Federal agencies, including the United States Environmental Protection Agency (EPA), California State Resources Agency, National Oceanic and Atmospheric Association (NOAA), regional/local governments and the United States Geological Survey. The California Department of Boating and Waterways, the local sponsor, signed the Feasibility Cost Sharing Agreement in September 2005.

Fiscal Year 2013 funds are being used to complete Regional Sediment Management plans in Orange and Los Angeles Counties, Santa Cruz, San Francisco and San Francisco Bay. Funds will also be used to initiate Regional Sediment Management plans for San Luis Obispo and complete review of the biological impact assessment, beneficial use guidelines and continue work on GIS and Webmapper application. Funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to complete the programmatic Environmental Impact Statement/Environmental Impact Report for regions including the Eureka Littoral Cell, San Francisco Coastline and North Monterey Bay. The estimated cost of the feasibility phase is $14,000,000. $13,800,000 will to be shared on a 50-50 percent basis by Federal and non-Federal interests plus $200,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal costs may be in-kind services.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$14,200,000
Reconnaissance Phase (Federal)	200,000
Feasibility Phase (Federal)	7,100,000
Feasibility Phase (Non-Federal)	6,900,000

Study Authority: House Committee on Transportation and Infrastructure Resolution 2672, dated May 22, 2002 and Section 227 of WRDA 1996.

The reconnaissance phase was completed in September 2005. The feasibility study completion is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

$2,000 rescinded from the study in FY 2011.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2013 $	Allocation FY 2013 $	Budget Allocation FY 2014 $	Additional to Complete After FY 2014 $
SURVEYS – NEW – (Ecosystem Restoration)					
Coyote Valley Dam Restoration, CA	100,000	0	0	100,000	0

San Francisco District

The study area is located in northern California on the east fork of the Russian River at Coyote Valley, near the city of Ukiah, about 115 miles northeast of San Francisco, California. The Russian River drains an area of 1,485 square miles. Approximately two-thirds of this area is in Sonoma County, with the remainder in Mendocino County. The existing Corps project, Coyote Dam, was completed in 1957. It consists of an earth-filled dam 160 feet high and 3,560 feet long, with a reservoir storage capacity of 122,000 acre feet. The authorized project included sediment management, flood control, and domestic and agricultural water supply pools with a storage capacity of 199,000 acre feet. A September 24, 2008 Biological Opinion (BO), issued by the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA/NMFS), mandates that USACE perform various actions to save threatened salmonid species. The BO calls for 15 actions that are directly related to the Corps, but the Corps only has authority to address seven actions. This study—which is a new start—will look at non-structural measures and studies required under the BO to keep the dam operational and to mitigate for impacts. Delay in completion of the study could potentially result in the extinction of a local genetic strain of threatened salmonids, and affect future operability of the Dam, which protects thousands from flood risks. The sponsor, the Sonoma County Water Agency, understands the two-phase planning process, and is willing to participate in 50-50 cost sharing of feasibility phase studies. The funds requested for Fiscal Year 2014 will be used to initiate and complete the reconnaissance phase of the study and negotiate the Feasibility Cost Sharing Agreement (FCSA) at full Federal expense. The reconnaissance phase is scheduled to be completed in September 2014, when the FCSA is executed, which is expected to be 12 months after initiating the study.

This study parallels the Dry Creek (Warm Springs) Restoration, CA study, also a new start in FY 2014. NOAA/NMFS issued a biological opinion that requires the Corps to correct water quality that inhibits the passage and breeding potential for threatened and endangered species on the Russian River. Though both studies address one BO on the Russian River, they will be carried out separately due to the fact that operations are pursuant to two separate dams with individual separate authorizations. Technically, the Dams' hydraulic operations are distinct and separate.

Study Authority: Section 204 of Public Law 81-516, the Flood Control Act of 1950.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2013 $	Allocation FY 2013 $	Budget Allocation FY 2014 $	Additional to Complete After FY 2014 $
SURVEYS – NEW – (Ecosystem Restoration)					
Dry Creek (Warm Springs) Restoration, CA	100,000	0	0	100,000	0

San Francisco District

The study area is located in northern California along the Russian River at Lake Sonoma and Warm Springs Dam, near the cities of Geyserville and Cloverdale, about 75 miles northeast of San Francisco, California. The Russian River drains an area of 1,485 square miles. Approximately two-thirds of this area is in Sonoma County, with the remainder in Mendocino County. The existing Corps project, Warm Springs Dam, is an earthen dam 319 ft high and 3,000 ft long, completed in 1983. The project authorization was amended by section 95 of the Water Resources Development Act of 1974 to compensate for fish losses on the Russian River which may be attributed to the operation of the Coyote Dam component of the watershed through measures such as possible expansion of the capacity of the fish hatchery. A September 24, 2008 Biological Opinion (BO), issued by the National Oceanic Atmospheric Administration's National Marine Fisheries Service (NOAA/NMFS) on Dry Creek at Warm Springs Dam, mandated that USACE perform various actions to save threatened salmonid species. The BO calls for 15 actions that are directly related to the Corps, but the Corps only has authority to address seven of these actions. This study—which is a new start—will look at non-structural measures and studies, as required by the BO, to keep the dam operating and to mitigate for associated impacts. Delay in study completion could potentially result in the extinction of a local genetic strain of threatened salmonids, and affect future operability of the dam, which protects thousands from flood risks. The sponsor, the Sonoma County Water Agency, understands the two-phase planning process, and is willing to participate in 50-50 cost sharing of feasibility phase studies. The funds requested for Fiscal Year 2014 will be used to initiate and complete the reconnaissance phase of the study and negotiate the Feasibility Cost Sharing Agreement (FCSA) at full Federal expense. The reconnaissance phase is scheduled to be completed in September 2014, when the FCSA is executed, which is 12 months after initiating the study.

This study parallels the Coyote Valley Dam Restoration, CA study, also a new start in FY 2014. NOAA/NMFS issued a biological opinion that requires the Corps to correct water quality that inhibits the passage and breeding potential for threatened and endangered species on the Russian River. Though both studies address the same BiOp on the Russian River, they will be carried out separately due to the fact that operations are pursuant to two separate dams with individual separate authorizations.

Study Authority: Section 203 of Public Law 87-874, the Flood Control Act of 1962.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
Los Angeles River Ecosystem Restoration, CA	4,261,000	3,406,000	5,000	350,000	100,000 2/	400,000 1/	0

Los Angeles District

The study area is located within the City of Los Angeles, California, along the Los Angeles River, and extends from downtown Los Angeles to Canoga Park, a distance of approximately 32 miles. This study investigates opportunities for ecosystem restoration following the degradation of the Los Angeles River ecosystem due to past flood control activities. In the 1930's and 1940's, the Corps, in conjunction with the Los Angeles County Flood Control District, channelized the Los Angeles River to alleviate devastating floods to Los Angeles, Long Beach, and other cities. Subsequent urbanization nearly eliminated natural riparian ecosystems and wetlands in the floodplain, leaving less than less than 1% of remnant habitats with little functional capacity. Through its reconnaissance study, the Corps identified remaining open space along the river corridor with potential for the river's restoration and reconnection to habitats in the adjacent Santa Monica Mountains. The study area is home to numerous special status species—including the Southwestern Pond Turtle, Southwestern Willow Flycatcher and Least Bell's Vireo—that could benefit from ecosystem restoration activities, as could local frogs, lizards, raptors and other water fowl. The City of Los Angeles views this study as part of a larger revitalization program for the City. The City of Los Angeles, the non-Federal sponsor, signed a Feasibility Cost Sharing Agreement in April 2006.

Recent in-progress reviews have identified that some work elements will require additional research and coordination. These in-progress reviews will require funding in FY 2014 in order to identify and address any unforeseen issues.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study and complete the report in August 2013. Funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to complete the feasibility phase, which includes the Chief of Engineer's Report. The estimated cost of the feasibility phase is $9,910,000 which includes $200,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal costs may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$10,095,000
Reconnaissance Phase (Federal)	185,000
Feasibility Phase (Federal)	4,076,000
Feasibility Phase (Non-Federal)	5,834,000 3/

Study Authority: House Public Works and Transportation Committee Resolution dated 11 June 1969 (Los Angeles County Drainage Area).

The reconnaissance phase was completed in December 2005. The feasibility study is scheduled to complete in Fiscal Year 2014.

1/ Estimated Unobligated Carry-in Funding: As of the date of this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013..

3/ Includes contributed funds from the local sponsor.

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
Redwood City Harbor, CA	2,604,000	580,000	70,000	400,000	0	800,000 1/	754,000

San Francisco District

Redwood City Harbor is a deep draft moderate use (<10M tons/yr) port located in San Mateo County, California, on the south west side of San Francisco Bay, about 20 miles south of San Francisco. An existing deep draft navigation project was completed in 1965 and is maintained at a depth of 30 feet by the Corps of Engineers. It consists of inner and outer turning basins and three channels, all used extensively for deep draft commercial vessel traffic, including petroleum, chemical, scrap metal, and construction material tonnage. Tonnage at the Port grew approximately 700% between the 1990s and mid 2000s. Tonnage at the Port was on the order of 2 million and 1.8 million tons, respectively, for the Port's FY 2005 and 2006. Due to the current economic downturn, tonnage has dropped to an estimated 1,000,000 tons in the latest fiscal year. Tonnage figures are rebounding with the economy and this trend is expected to continue. The Port is very diversified in its operations and the goods it imports and exports. During the housing boom in the bay area in the late 1990's to mid 2000's, over a million tons of construction materials a year were being brought in to fuel rapid development in the San Francisco South Bay. Currently one of the biggest enterprises at the Port is the collection and processing of scrap metal which is being shipped to China in record tonnage amounts. The Port Deepening study will address deepening the project up to 35 feet and will ameliorate continued navigation hazards as well as loss of revenues and commerce. New larger vessels, which currently call on the port, require more than the authorized depth. These vessels are forced to light load and top off at other ports, significantly adding to the cost of calling on the port and reducing the amount of materials that can be imported and exported from the Port. It was recently estimated by the Port that the average vessel visiting the Port loses approximately $275,000 a visit in dead freight and demurrage fees (extra fees needed to time the tides when riding into the Port) due to limited depths at the Port. As a result of rescoping the study, the costs to complete have increased from what was last presented to Congress (FY 2001). A deepening project would improve transportation efficiency and eliminate wasted time. The Port of Redwood City, the local sponsor, signed the Feasibility Cost Sharing Agreement in July 2008.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $4,762,000. $4,612,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests plus $150,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$4,910,000
Reconnaissance Phase (Federal)	148,000
Feasibility Phase (Federal)	2,456,000
Feasibility Phase (Non-Federal)	2,306,000

Study Authority: House Committee on Transportation and Infrastructure Resolution Docket 2511, adopted May 7, 1997.

The reconnaissance phase was completed in July 2008. The feasibility study completion date is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amout in FY 2014 $	Additional to Complete After FY 2014 $
Sacramento and San Joaquin Comprehensive Basin/ Central Valley Integrated Flood Management Study, CA	2,666,000	1,270,000	(149,000)	287,000	300,000 2/	466,000 1/	492,000

Sacramento District

The study area includes the entire Sacramento River Basin in central California with a large watershed which covers 27,000 square miles, not including the Sacramento-San Joaquin Delta. The study is within the Central Valley with impacts to the Sacramento-San Joaquin Delta, an ecosystem of national significance, and is a part of the Interim Federal Action Plan. This Central Valley Integrated Flood Management Study is the strategic link between the State of California's Central Valley Flood Protection Plan and other ongoing site-specific projects under development by the Corps. The State of California has identified its priorities for flood risk management in the Central Valley at a basin-wide scale. The study will identify the appropriate level of Federal interest in the State's Central Valley Flood Protection Plan at a regional scale. It is anticipated that the Central Valley Integrated Flood Management Study will make recommendations leading to potential authorization for Federal participation in future flood damage reduction projects. The study area includes a population in the watershed of about 2.2 million, of which over 25% is at risk of flooding; approximately $69 billion in assets at risk of flooding (structural, content value, estimated annual crop production); 378 special status plant and animal species; and a water supply delivery system (that overlays much of the existing flood risk management system) which provides drinking water to over 2/3 of Californians (Sacramento and San Joaquin River Basins Comprehensive Study, Interim Report, December 2002; State of California 2012 Central Valley Flood Protection Plan). The study area includes the only river system in the nation where all five species of salmon can be found. In addition to being home for numerous endangered species, it is part of an international flyway for migratory birds (Pacific Flyway). The Central Valley encompasses 10% of the nation's gross agricultural production.

Local, state, and federal water resource agencies support a coordinated multi-objective investigation to balance flood risk management, environmental restoration, and other water resource purposes within the Central Valley. The Central Valley Integrated Flood Management Study is building on and will incorporate existing studies (including the Central Valley Flood Protection Plan), as well as tools and data sets, in the development of a comprehensive, watershed-oriented plan. The study will require an extensive public outreach program and coordination with Federal, State, Local and Tribal agencies to develop a plan that is supported by the various interest groups. As a result of rescoping the study, the costs to complete are reduced from what was last presented to Congress (FY 2013). The study will produce a watershed management plan. The State of California Department of Water Resources and Central Valley Flood Protection Board, the local sponsors, signed the Feasibility Cost Sharing Agreement in July 2010, and an amendment increasing the study cost is scheduled to be signed in March 2013.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $4,932,000. $4,532,000 is to be shared on a 50-50 percent basis by Federal and non-Federal interests plus $400,000 for Independent External Peer Review at 100 percent Federal expense. Up to 100 percent of the non-Federal costs may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$ 4,932,000
Feasibility Phase (Federal)	2,666,000
Feasibility Phase (Non-Federal)	2,266,000

Study Authority: Flood Control Act of 1962, Pub. L. 87-874, § 209, 76 Stat. 1180, 1197 (1962); House Resolution dated May 8, 1964.

The watershed study completion is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $250,000. This amount will be used to perform work on the study as follows: Generate a draft feasibility report based upon the results of the Tentatively Selected Plan and Agency Decision Milestones.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013..

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
Sacramento River Bank Protection Project (GRR), CA	1,500,000	0	0	0	0	500,000 1/	1,000,000

Sacramento District

The Sacramento River Flood Control Project consists of 977 miles of levees plus overflow weirs, pumping plants and bypass channels along the Sacramento River from River Mile (RM) 0 near Collinsville to RM 194 near Chico, including several sloughs and the lower reaches of major tributaries. The Sacramento River levee system was initiated as a purely local project and in many cases the levees were constructed close to the riverbanks without a protective berm. The levee system, which was adopted as the Sacramento River Flood Control Project in 1917, has been modified and expanded several times since that date but no major change in the basic levee alignment has been made since the original conception of the project. Bank protection is necessary to preserve the Sacramento River Flood Control Project and ensure that it will continue to furnish the designed degree of protection. The levees are continuously threatened by erosion, and unless corrective measures are taken, levee failures may occur with resultant catastrophic damage and possible loss of many lives. Flood events that occurred in February 1986 and January 1997 greatly emphasized these problems. Several levees located along the Sacramento River were subjected to an extensive amount of erosion due to the extremely high river flows. High flows in January and March 1995 caused flooding and erosion in the Butte Basin area along the Sacramento River, RM 188 at Glenn County Road 29. If levee repairs had not been made, additional flooding would have caused extensive loss of agricultural land and endangered residents in nearby communities of Butte City, Princeton and Colusa. In addition, during moderately high flows in February 1996, a 500 foot portion of berm on the American River failed, threatening the levee protecting the city of Sacramento. A contract was awarded in August 1996 to repair this section and provide bank protection for a total of 1,200 lineal feet. The 1997 flood event and the high flows experienced in 1998 again put additional stress on the levee system (approximately 1,100 river miles) within the Sacramento River Bank Protection Project. The sustained high water in January/February 2006 caused great concern and instigated an emergency declaration from the Governor of California relative to levee repair. The area protected by the levees comprises over one million acres in which about 50 communities are located; value of improvements (October 2003 prices) to be protected is about $38 billion and about 2.3 million people live within the flood plain. The levee system enables the use of the flood plain for the benefit of the state and nation. The extremely fertile flood plain lands produce about 6.6 percent of the total agricultural production of the state and over 88 percent of the state's rice production. The Sacramento River Bank Protection Project provides a long-range program of bank protection to protect the levees where serious erosion is occurring and to prevent erosion from undermining additional levee sections in the future. In addition to assuring urgently needed flood protection, the project provides recreation facilities consisting of boat launching facilities, campgrounds and picnic areas needed along the river to meet a rapidly increasing public demand. Since the initial bank protection contract was let in June 1963, about 837,462 lineal feet of bank protection has been provided. Approximately 83,491 lineal feet of bank protection, including 80,000 authorized by WRDA 2007, remains to be placed on the second phase of this project. The local sponsor supports the addition of a third phase, which will require Congressional authorization. A General Reevaluation Report (GRR) is being conducted to address remaining and potential future sites.

The State of California has expressed support for the study, understands the two phase planning process, and is willing to participate in 50-50 cost-sharing of feasibility phase studies. The Feasibility Cost Sharing Agreement is scheduled to be signed in October 2013.

The funds requested for FY 2014, plus any carry-in funds, will be used to initiate the GRR to address changes in conditions, policy and guidance that have occurred since project authorizations in 1960 and 1974 for a potential new/revised authorization and to move forward into Phase 3. The preliminary estimated cost of the feasibility phase is $3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to 100 percent of the non-Federal costs may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,000,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

Study Authority: Flood Control Act of 1950, Pub .L. 81-516, § 205; Flood Control Act of 1960, Pub. L. 86-645, § 203, 74 Stat. 488, 498 (1960); River Basin Monetary Authorization Act, Pub. L. 93-252, § 202, 88 Stat. 49 (1974); Water Resources Development Act of 2007, Pub. L. 110-114, § 3031, 121 Stat. 1041, 1113.

The GRR completion is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
Sacramento-San Joaquin Delta, Delta Islands and Levees, CA (Completion)	5,721,000	3,049,000	239,000	971,000	1,015,000 2/	447,000 1/	0

Sacramento District

The study area is within the California Bay Delta, an ecosystem of national significance, and is a part of the Interim Federal Action Plan. The study area is located in Sacramento, San Joaquin, Solano, Contra Costa, Alameda, and Yolo counties, California and extends from Sacramento south to the cities of Stockton and Tracy, and west to and including Suisun Bay. The Sacramento-San Joaquin Delta consists of about 740,000 acres of land segregated into some 80 tracts and islands and 1,100 miles of levees. Delta levees are key infrastructure that conveys significant municipal and industrial water supply deliveries for 25,000,000 Californians; that conveys irrigation water supply for millions of acres of high value agriculture; that is part of a delicate ecosystem that supports 750 species of wildlife including 55 listed endangered species; and that protects 500,000 inhabitants. The Delta Islands and Levees Study will identify Federal (USACE) interest in flood risk management and ecosystem restoration opportunities that are being identified in key State of California plans for the California Bay-Delta. The report will identify synergies with these State plans with an emphasis on improving resiliency and safety of key infrastructure.

The state of California, the local sponsor, signed the Feasibility Cost Sharing Agreement in May 2006.

Fiscal Year 2013 funds are being used to develop and evaluate an array of alternatives and work toward a tentatively selected plan. Funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to complete the feasibility phase of the study. The total estimated cost of the feasibility phase is $10,912,000. $10,662,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests plus $250,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal costs may be in-kind contributions. A summary of study cost sharing is a follows:

Total Estimated Study Cost	$11,052,000
Reconnaissance Phase (Federal)	140,000
Feasibility Phase (Federal)	5,581,000
Feasibility Phase (Non-Federal)	5,331,000

Study Authority: Senate Resolution dated 1 June 1948 and the Flood Control Act of 1950, Pub. L. 81-516, § 205, 64 Stat. 163 (1950).

The reconnaissance phase was completed in May 2006. The feasibility study is scheduled for completion in Fiscal Year 2014.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013..

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2013 $	Allocation FY 2013 $	Budget Amount FY 2014 $	Additional to Complete After FY 2014 $
SURVEYS – NEW – (Ecosystem Restoration)					
Salton Sea, CA	200,000 1/	0	0	200,000	0

Los Angeles District

The Salton Sea project area is located in the southeastern corner of California and spans across Riverside and Imperial counties. The Salton Sea is faced with eroding water quality and diminishing water supplies. Water sources from the Colorado River have been lost due to natural and human actions. Degrading water quality has caused periodic fish and bird kills. As the lake shrinks, exposed lakebed sediments release wind-blown contaminants increasing risks to human health in the Coachella and Imperial Valleys in California and Mexico. The Salton Sea is the main feature of the Sonny Bono National Wildlife refuge. This high salinity lake plays a vital role in the connectivity of bird migratory routes to and from breeding grounds as far as Alaska and Peru. It is a critical stop for migrating birds along the Pacific Flyway, an important lake fishery in the arid southwest, and provides habitat for over 400 different species. Among them are Federally listed species such as the Yuma clapper rail and the desert pupfish. The sea also provides roosting, breeding, and foraging areas for migratory birds including but not limited to brown pelicans, white pelicans, and eared grebes. Previous studies completed by the Bureau of Reclamation, the State of California and the Salton Sea Authority have identified potential long term solutions for partial and full restoration of the Salton Sea.

In accordance with Section 3032 (b) (1) (A) of the Water Resources Development Act of 2007, “The Secretary shall review the plan approved by the State, entitled the ‘‘Salton Sea Ecosystem Restoration Program Preferred Alternative Report and Funding Plan’’, and dated May 2007 to determine whether the pilot projects described in the plan are feasible.” The funds requested for Fiscal Year 2014 will be used to review and evaluate the State of California Plan and identify preliminary pilot projects that are feasible for construction. This effort will include meeting with State staff, site visits, and review of the existing plan and accompanying Environmental Impact Statement/Environmental Impact Report by technical and environmental specialists.

Study/Construction Authority: Section 3032, Water Resources Development Act of 2007. This provision authorized this program to be appropriated up to $30 million ($5 million per project). 1/ The $200,000 Investigations funding will be part of the $30 million program limit.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
San Francisco Bay to Stockton, CA	6,388,000	3,338,000 3/	0	800,000 2/	0	700,000 1/	1,550,000

San Francisco District

The project includes the John F. Baldwin (JFB) Ship Channel (consisting of the San Francisco Bar, Richmond Outer Harbor, West Richmond, Pinole Shoal, and Suisun Bay Channels) and the Stockton Ship Channel. Portions of the channel have already been deepened to the authorized depth. Phase I of the JFB resulted in the construction of the San Francisco Bar Channel in 1974. The project created the Pacific Ocean offshore approach channel to the San Francisco Bar Channel Entrance. This shipping channel (55 ft deep—mean lower low water (MLLW) and 2000 ft wide) serves as the exclusive deep water ocean entrance to the San Francisco Bay. Completed in 1986, Phase II of the project deepened the central San Francisco Bay channel to -45 ft MLLW. Phase IV consisted of deepening the Stockton Deep Water Ship Channel to -35 ft MLLW in 1988. The proposed project includes deepening of the West Richmond, Pinole Shoal, Suisun Bay, and Stockton Ship Channels, which are currently maintained at -35 feet, and provide access to oil terminals, industry in the city of Pittsburg, and the Port of Stockton. A General Reevaluation Report (GRR) is being prepared to determine the feasibility of modifying the current channel dimensions and determine if the deepening of the project is environmentally and economically justified to a depth of approximately -40 feet. The depth of deepening is dependent on the environmental and economic outputs to be derived for the GRR. The study has been nominated for the President's Improving and Expediting the Review and Permitting Process Program initiative. Dimensions of the deep-draft navigation channels extending from the San Francisco Bay to the Port of Stockton are currently inefficient and unsafe for many of the commercial vessels using these channels. Unsafe conditions could arise from loaded vessels running aground on unknown or undocumented high spots in the channel. On August 11, 2010, U.S. Transportation Secretary Ray LaHood designated the Stockton Ship Channel, San Joaquin River, as part of "America's Marine Highway Program" for its significant contribution to the Nation's Economy. This designation of the 75-mile stretch of the San Joaquin River that runs from the San Francisco Bay to the Stockton Deep Water Ship Channel as a Marine Highway Corridor, officially connects the Port of Oakland (the 4th busiest port in the Nation), to the Port of Stockton and facilitates a bypass of the congested surface transportation system by providing a 100% water route to and from the Port of Stockton. The Port of Stockton, the local sponsor, signed the design agreement in 2002.

The funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to continue the GRR to include completing alternative analysis and prepare a draft report. The total estimated cost for the GRR is $8,517,000 which is to be cost-shared on a 75-25 percent basis by Federal and non-Federal interests.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$8,517,000
GRR (Federal)	6,388,000
GRR (Non-Federal)	2,129,000

The project is authorized for construction in the River and Harbor Act of 1965.

The GRR completion date is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ Funds provided under the Construction appropriation.

3/ Represents the GRR only funded under the Construction appropriation (FY 2002 through FY2010).

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
San Joaquin River, California Lower San Joaquin River	3,930,000	1,605,000	520,000	300,000	24,000 2/	751,000 1/	730,000

Sacramento District

The study is within the California Bay Delta, an ecosystem of national significance, and is part of the Interim Federal Action Plan. The study area is located along the lower (northern) portion of the San Joaquin River system in the Central Valley of California. The San Joaquin River originates on the western slope of the Sierra Nevada and emerges from the foothills at Friant Dam. The river flows west to the Central Valley, where it is joined by the Fresno, Chowchilla, Merced, Tuolumne, Stanislaus and Calaveras Rivers, and other smaller tributaries, as it flows north to the Sacramento-San Joaquin Delta. The Lower San Joaquin River study area includes the mainstem of the San Joaquin River from the Mariposa Bypass downstream to and including the city of Stockton. The study area also includes the distributary channels of the San Joaquin River in the southern most reaches of the Delta. The Interim Report for the Sacramento and San Joaquin River Basins Comprehensive Study (2002) identified a need for projects to be developed on system-wide, regional and local scales. The Interim Report identified seven regions that share common characteristics including the Lower San Joaquin River region. The current study area encompasses the communities of Stockton, Lathrop, and Manteca, California. The population at risk in the metro area is approximately 685,306 with a damageable property value of $11.7 billion and preliminary estimates of expected annual damages exceeding $20 billion (2012 values). Critical infrastructure in the study area includes Interstate 5, Highway 99, Highway 4 (major statewide connectors), three hospitals, agricultural processing facilities and the Stockton Metropolitan Airport. The project would provide improved flood risk management and environmental restoration to the Central Valley of California, and is a key means of contributing to the attainment of the State of California's goals in their Central Valley Flood Protection Plan for the greater Stockton metropolitan area. The Feasibility Cost Sharing Agreement (FCSA) was executed with the San Joaquin Area Flood Control Agency, the local sponsor, in February 2009 and amended in June 2010 adding the state of California as a sponsor. A second amendment to the FCSA allowing the sponsors to accelerate the non-Federal cost share for the study was executed in August 2012.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2014 plus any carry-in funds, will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $7,190,000. $6,940,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests plus $250,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$7,400,000
Reconnaissance Phase (Federal)	210,000
Feasibility Phase (Federal)	3,720,000
Feasibility Phase (Non-Federal)	3,470,000

Division: South Pacific District: Sacramento San Joaquin River, Lower San Joaquin River, California

Study Authority: Flood Control Act of 19628, Public Law 874, § 203; HR 8 May 1964; House Report 108-357, Energy and Water Development Appropriations Act, 2004, (Conference Report).

The feasibility study completion is to be determined.

1/ Estimated Unobligated Carry-In funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ Reflects $24,000 reprogrammed to the study.

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
South San Francisco Bay Shoreline, CA (Completion)	10,233,000	8,843,000	2,000	353,000	0	1,035,000 1/	0

San Francisco District

The overall study area is located along the shoreline of South San Francisco Bay, California, extending from the city of Palo Alto to the city of San Leandro and includes 15,100 acres of salt ponds. A substantial portion of the study area is protected by non-engineered berms that provide precarious protection from tidal flooding for extensive infrastructure, including residential, commercial and industrial developments, including the heart of Silicon Valley. The last estimated value of the urban development in low-lying areas along the Bay shoreline was approximately $5.5 billion at the September 1998 price level. The study will examine tidal flooding problems, solutions and environmental restoration opportunities that would restore wetland habitat along the bay shoreline. This habitat would support threatened and endangered species including the salt marsh harvest mouse and the California clapper rail. Due to the high cost estimate of $500 million to construct the entire project area it was necessary to break up the study area into 4 geographical subunits, each of which would have its own interim feasibility study. The Feasibility Scoping Milestone has been completed and the re-scoped study is focusing on the Alviso Pond Complex Area as the first interim study. Of particular interest is the provision of tidal flood protection for the study area, enabling environmental and habitat restoration of the former Cargill South Bay Salt Ponds by the State of California and U.S. Department of Interior. As a result of rescoping the study, the costs to complete have increased from what was last presented to Congress (FY 2006). The California Coastal Conservancy and the Santa Clara Valley Water District, co-sponsors for the first interim study of the Alviso Pond complex and Santa Clara County area, signed the Feasibility Cost Sharing Agreement in September 2005.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to complete the feasibility phase for the Alviso Pond Complex Area, the first interim study. Future interim feasibility studies will be conducted via separate Project Management Plans and Feasibility Cost Sharing Agreements, subject to availability of funds and a local sponsor. The estimated cost of this feasibility phase is $19,594,000. $19,394,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests plus $200,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$19,930,000
Reconnaissance Phase (Federal)	336,000
Feasibility Phase (Federal)	9,897,000
Feasibility Phase (Non-Federal)	9,697,000

Study Authority: Section 142 of the Water Resources Development Act of 1976, P.L. 94-94-587, *amended by* Water Resources Development Act of 1986, P.L. 99-662; House Committee on Transportation and Infrastructure Resolution Docket No. 2697, July 24, 2002; and Section 4027 of the Water Resources Development Act of 2007, P.L. 110-114.

The reconnaissance phase was completed in September 2005. The feasibility study is scheduled for completion in Fiscal Year 2014.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost $	Allocations Prior to FY 2013 $	Allocation in FY 2013 $	Budgeted Amount for FY 2014 $	Additional to Complete After FY 2014 $
SURVEYS – NEW					
Yuba River Ecosystem Restoration, CA	100,000	0	0	100,000 1/	0

Sacramento District

The study area is the lower Yuba River channel downstream from Englebright Dam (approximately 11 miles upstream from the city of Marysville, Yuba County, California) downstream to the Feather River and the adjacent groundwater basin. The purpose of the study is to determine if there is a Federal interest in undertaking project modifications for implementing fish habitat restoration, fish passage improvements and related flood risk management for Daguerre Point Dam and downstream of Englebright Dam. The goal is to improve fish passage for native anadromous fish species to avoid jeopardizing listed species or adversely modifying critical habitat and to contribute to overall population recovery. The Yuba River includes a natural spawning run of spring-run Chinook salmon and steelhead, both of which are listed as threatened under the Endangered Species Act. The existing fish ladders do not work efficiently at Daguerre Point Dam. Englebright Dam is a complete barrier to fish passage. The fish ladders at Daguerre Point Dam are relatively small compared to standard specifications for ladder design, and tend to clog with woody debris that can block passage or substantially reduce attraction flows, although grates recently installed over the fish ladder bays should reduce the occurrence of blockages by woody debris. The flow in the Yuba River significantly exceeds the fish ladder capacities, hydraulically masks the fish ladder entrances, and renders the ladders ineffective for the greater part of all migration periods. The goal is to improve passage for threatened species at Daguerre Point Dam while preserving its numerous benefits to the region, which include flood risk management for downstream communities including Marysville and Yuba City, and agricultural water supply for six irrigation entities: the Hallwood Irrigation Company, the Cordua Irrigation District, the Ramirez Water District, the Browns Valley Irrigation District, the Brophy Water District, and the South Yuba Water District. The National Marine Fisheries Service recently issued a jeopardy biological opinion for the projects and considers the area key to species recovery. An Initial Appraisal Report (July 2005) indicates that an economically justifiable solution can be formulated to repair the fish ladders, preserve water supply interests, and address related downstream flood protection. The proposed local sponsor, the California Department of Water Resources, expressed support for the study, understands the two-phase planning process, and is willing to participate in 50-50 cost-sharing of feasibility phase studies. The funds requested for Fiscal Year 2014 will be used to initiate and complete the reconnaissance phase of the study and negotiate the Feasibility Cost Sharing Agreement (FCSA) at full Federal expense. The reconnaissance phase is scheduled to be completed in Fiscal Year 2014, when the FCSA is executed, which is expected to be 12 months after initiating the study.

Study Authority: Flood Control Act of 1970, Pub. L. 91-611, § 216, 84 Stat. 1824, 1830 (1970).

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

New Mexico

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
Espanola Valley, Rio Grande and Tributaries, NM	3,422,000	2,600,000	119,000	50,000 3/	30,000 2/	300,000 1/	323,000

Albuquerque District

The Española Valley lies at the confluence of the Rio Grande, Rio Chama, Santa Cruz River, and several lesser streams in north-central New Mexico. Española, the largest community in the valley, is located 85 miles south of the New Mexico-Colorado border and 25 miles north of Santa Fe. Three tribal nations (Pueblos) are located within the study area. The Rio Grande is the 4th largest watershed in North America and has been designated by the World Wildlife Fund as one of the world's Top 10 rivers at risk. The bosque (forest) along the Rio Grande functions as critical habitat within the Española Valley. Wetlands in the area also play a critical role in the larger ecosystem through maintaining water quality by filtering out sediments, harmful toxins and excess nutrients along the Rio Grande. The basin has suffered significant ecosystem and environmental degradation due to disruption of these riparian areas by urbanization, exotic species introduction, livestock grazing, flood control or water management. In addition, the basin has been subject to numerous severe floods since 1865; the most recent in 1958, 1969, 1970, 1978, 1987, and 1991. These floods were caused by summer rainfall or spring snowmelt. Corps of Engineers surveys after the floods in 1969 and 1970 estimated damages of $2,755,000 and $1,425,000 (October 2012 price levels), respectively. Flood damages occurred in Española, numerous small towns and villages, and at the pueblos, causing both residential and commercial damages including urban and rural bridges, crops, orchards, and irrigation facilities. More recent flooding has occurred in 2011 and 2012, following devastating fires in the upper watershed, resulting in damages to the Pueblos and loss of drinking water supplies in the cities of Santa Fe and Albuquerque. The feasibility study will determine the potential to provide ecosystem restoration, flood damage reduction measures, water quality improvements and recreation enhancements from the Ohkay Owingeh Pueblo to the San Ildefonso Pueblo along the Rio Grande including the city of Española, New Mexico. Proposed restoration features will improve and increase habitat (cottonwood, riparian gallery forest, wetlands type) in the study area, including habitat of the endangered Rio Grande Silvery Minnow and the Southwestern Willow Flycatcher. These features will make a significant connection between existing habitat areas in the Middle Rio Grande and provide a significant contribution to key life requistes for the silvery minnow and flycatcher. As a result of rescoping the study, the costs to complete have increased from what was last presented to Congress (FY 2006). This feasibility study is a unique effort with three tribal nations, the Pueblos of Santa Clara, San Ildefonso and Ohkay Owingeh, who signed a Feasibility Cost Sharing Agreement in December 2005.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2014 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility study is $5,750,000. $5,700,000 will be shared on a 50-50 percent basis by Federal and non-Federal interests plus $50,000 for Independent External Peer Review funded at 100 percent Federal expense. Up to 100 percent of the non-Federal costs may be in-kind services.

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$6,272,000
Reconnaissance Phase (Federal)	522,000
Feasibility Phase (Federal)	2,900,000
Feasibility Phase (Non-Federal)	2,850,000

Study Authority: Flood Control Act of 1941 (P.L.77-228) as amended by Resolution of the Senate Committee on Environment and Public Works dated December 10, 2009.

The reconnaissance phase was completed in December 2005. The feasibility study completion is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ $30,000 funded under the Continuing Resolution Act – reconciliation.

3/ Reflects reprogramming of $50,000 to the study.

$0 rescinded from the study.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Total Estimated Federal Cost $	Allocations Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budgeted Amount in FY 2014 $	Additional to Complete After FY 2014 $
Rio Grande Basin, NM, CO, and TX	5,410,000	2,593,000	499,000	237,000 3/	300,000 2/	300,000 1/	1,481,000

Albuquerque District

The Rio Grande Basin is located in the states of New Mexico, Colorado, and Texas, and encompasses an area over 160,000 square miles including 439 acres (78, 184, 177 acres, respectively), from the headwaters of the Rio Grande in central Colorado to its mouth at the Gulf of Mexico near Brownsville, Texas. The river forms the international boundary between the United States and Mexico starting near El Paso, Texas.

Flooding, ecosystem restoration, water quality and interstate/international water deliveries are major issues in the basin. River flow regulation by nine major Corps of Engineers and Bureau of Reclamation dams on the main stem and tributaries for flood risk management and water delivery has changed the historical flow regime in the Rio Grande. Water is diverted for irrigation, industrial and residential uses, and for water deliveries in accordance with Interstate Compact Compliance and International Treaty Compliance. Changes in hydrology, channel configuration, land use activities, and the spread of exotic vegetation have adversely impacted the native riverine ecosystem to the extent that indicator species such as the Rio Grande Silvery Minnow and the Southwestern Willow Flycatcher are now listed as endangered under the Endangered Species Act. This listing, in turn, is impacting existing flood risk management and water delivery operations. Another critical issue involves water supply storage at Elephant Butte Reservoir and Lake Amistad. Unless these losses are addressed, the Rio Grande Basin may lose at least one full year of its drought contingency potential by the year 2050. Many border cities in Texas and Mexico also depend on the Rio Grande for water supply, and under international agreements, 60 percent of the Rio Grande water rights below Fort Quitman, Texas belong to Mexico. Some border cities have rudimentary or non-existent water and wastewater treatment system, which further exacerbates environmental degradation.

The watershed assessment will provide interagency collaboration to develop ecosystem restoration, watershed analysis and adaptive management strategies needed to improve degraded ecosystems in New Mexico, Colorado and Texas and develop and evaluate potential salinity control management strategies. The states of New Mexico, Colorado and Texas (Texas Water Development Board) fully support this study and have signed three Feasibility Cost Sharing Agreements since 2001. Phase 1 was signed in December 2001 with the state of New Mexico; this phase was completed in June 2004. The Feasibility Cost Sharing Agreement for Phase 2 was signed in July 2005 with the state of Texas was completed in January 2008. The Feasibility Cost Sharing Agreement for Phase 3 was signed in September 2008 with the state of New Mexico and was amended in March 2012 to include the state of Texas.

Fiscal Year 2013 funds are being used to continue the watershed assessment and execute a second amendment to the Phase 3 Feasibility Cost Sharing Agreement. Funds requested for Fiscal Year 2014, plus any carry-in funds, will be used to continue the watershed assessment. The estimated cost of the assessment is $6,300,000 which is to be shared on a 75-25 percent basis by Federal and non-Federal interests, in accordance with Section 202 of the Water Resources Development Act of 2000, Section 2010 of the Water Resources Development Act of 2007 (modified non-Federal cost-sharing from 50% to 25%) and Section 108 of the 2008 Energy and Water Development Appropriations Act (allows the entire non-Federal share to be work-in-kind).

A summary of study cost sharing is as follows:

Total Estimated Study Cost	$6,985,000
Reconnaissance Phase (Federal)	685,000
Feasibility Phase (Federal)	4,725,000
Feasibility Phase (Non-Federal)	1,575,000

Study Authority: Section 729 of the Water Resources Development Act of 1986, amended by Section 202 of the Water Resources Development Act of 2000 and Section 2010 of the Water Resources Development Act of 2007; Section 108 of the Consolidated Appropriations Act, 2008 (P.L. 110-161).

The watershed assessment completion is to be determined.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013..

3/ $50,000 reprogrammed from the study.

$1,000 rescinded from the study in FY 2011.
$0 transferred to the Flood Control and Coastal Emergencies (FCCE) account.

Construction

California

APPROPRIATION TITLE: Construction – Local Protection, Flood Risk Management

PROJECT: American River Watershed (Common Features), California (Continuing)

LOCATION: The project is located in Placer, El Dorado and Sacramento Counties, California and includes three principal streams, the North, Middle and South Forks of the American River that flow westward into Folsom Lake. The outflow of the lake through Folsom Dam then flows through the city of Sacramento and into the Sacramento River. The system includes the Folsom Dam and Reservoir, located on the American River, about 29 miles upstream of the city of Sacramento, California. The American River watershed drains about 2,100 square miles northeast of Sacramento.

DESCRIPTION: The Water Resources Development Act (WRDA) of 1996 authorized the installation of 24 miles of slurry wall along the north and south banks of the American River. This work was completed in early 2001. During construction, sections of levee obstructed by large utilities, highways, etc, were bypassed creating 30 gaps in the seepage/stability remediation. WRDA 1999 authorized remediation of additional sites such as Natomas East Main Drainage Canal (NEMDC), Jacob Lane, Howe Avenue, and the Mayhew Levee Raise and Closure Structure. The objective of the program is to close the remaining gaps in the levees using cutoff walls or other methods. There are four sites left to construct under WRDA 1996, with two contracts planned in FY 2013. One WRDA 1999 site is being constructed in FY 2014 (contract planned for FY 2013). Completion of this remaining WRDA 1996 and 1999 work will lead to the complete realization of the benefits of the currently authorized work.

Under this Project we completed the Natomas Post Authorization Change Report (PACR), Chief's Report dated 30 December 2010. This is a separable element pending authorization. We are also completing a General Re-evaluation Report (GRR) by 2014, which will require additional authorization to construct additional elements.

AUTHORIZATION: Water Resources Development Act of 1996, Pub .L. 104-303, § 101(1) (A), 110 Stat. 3658, 3362 (1996); Water Resources Development Act of 1999, Pub. L. 108-132, § 366 (a), 113 Stat. 269, 319 (1999); Energy and Water Development Appropriations Act of 2004, Pub .L. 108-137, § 129, 117 Stat. 1827, 1839 (2004); Energy and Water Development Appropriations Act of 2008, Pub .L. 110-161, § 130, 121 Stat. 1937, 1947 (2008).

REMAINING BENEFIT-REMAINING COST RATIO: 6.7 to 1 at 7 percent (authorized WRDA 96/99 sites)

TOTAL BENEFIT-COST RATIO: 3.00 to 1 at 7 percent (authorized WRDA 96/99 sites)

INITIAL BENEFIT-COST RATIO: 4.4 to 1 at 7-5/8 percent

BASIS OF BENEFIT-COST RATIO: Initial benefits are from the Supplemental Information Report (SIR) approved June 1996 at 1995 price levels for work authorized in WRDA 1996. Benefits and costs are originally from the Second Addendum to the SIR approved October 2002 at October 2001 price levels. Current benefits and costs were updated in the American River Watershed Economic updated dated June 2011.

SUMMARIZED FINANCIAL DATA				STATUS (1 JAN 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$217,360,000		WRDA 1996 Features	90	TBD
Estimated Non-Federal Cost		72,216,000		WRDA 1999 Features	90	TBD
Cash Contribution	$57,825,000			WRDA 1996/1999 and		
Other Costs	14,391,000			Natomas PACR	100	Dec 2010
Total		$289,576,000		Entire Project	92 *	Unsched

		ACCUM PCT OF EST FED COST	PHYSICAL DATA
Allocations to 30 September 2010	$167,440,000		Streamflow Gages – Install 3 new telemetered gages upstream of Folsom Lake (WRDA 1996)
Allocation for FY 2011	14,595,000		
Allocation for FY 2012	21,925,000		
Conference Allowance for FY 2013	6,400,000	5/	
Allocations through FY 2013	210,360,000	1/ 2/ 3/ 6 97	Flood Warning System – Install on lower American River (WRDA 1996)
Estimated Unobligated Carry-In Funds	0	4/	
President's Budget for FY 2014	2,500,000	98	
Programmed Balance to Complete after FY 2014	4,500,000	7/	Closure Structure – Install at Mayhew Drain (WRDA 1999)
Un-programmed Balance to Complete after FY 2014	0		
			Levees: -Construct slurry and jet grout cutoff wall on 19.7 miles of lower American River levees (WRDA 1996)

* Assumes new authorization occurs as a result of the submission of the Natomas Post Authorization Change (PAC) Report to Congress (see OTHER INFORMATION).

1/ $7,022,000 reprogrammed to the project.

2/ $276,000 rescinded from the project.

3/ $143,900 transferred to the Flood Control and Coastal Emergencies account.

Division: South Pacific District: Sacramento American River (Common Features), CA

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.
6/ PED costs of $5,338,000 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

SUMMARIZED FINANCIAL DATA (Continued)

PHYSICAL DATA (Continued)

- Modify 4.4 miles of American River levees (WRDA 1999)
- Modify 12.1 miles of Sacramento River levees (WRDA 1996)
- Modify 10 miles of Natomas Cross Canal levees (WRDA 1999)

JUSTIFICATION: This flood risk management project warrants a high funding priority because it addresses significant risk to human safety in accordance with the U.S. Army Corps of Engineers performance-based guidelines for the construction account. Folsom Dam and Reservoir are key features for flood risk management for Sacramento. Folsom Dam and Reservoir has a capacity of 975,000 acre-feet, which includes a minimum of 400,000 acre-feet of space seasonally dedicated to the mitigation of flood risk. Significant rainfall in recent years has filled Folsom Lake and necessitated record releases in excess of design flow downstream. The levees along the American River are designed to accommodate releases from Folsom Dam of up to 115,000 cfs. Downstream levees would likely fail with sustained flows above this level. Levee failure along the lower American River and Sacramento River could result in flooding of more than 100,000 acres, affecting approximately 900,000 residents, with damages of up to $58 billion, depending on the magnitude of the event.

The Common Features project, consisting of levee improvements along the American and Sacramento Rivers and Natomas Cross Canal, installation of new and telemetering existing streamflow gages and implementing a new flood warning system on the lower American River as authorized in WRDA 1996 and WRDA 1999, would decrease the probability of flood damage to about a 1 in 86 chance in any given year. Until the remaining WRDA 96/99 features and the Federal plan as yet to be recommended in the GRR are constructed, the Folsom Dam Modifications (aka Joint Federal Project or JFP) releases must not exceed current channel capacity of 115,000 cubic feet per second, which is much less than the 160,000 cubic feet per second design release of the Folsom Dam JFP. The Population At Risk and Population Affected are both 900,000 and the risk depth varies between 3 and 10 to 30 feet with a risk warning time of 12 hours. Risk Based Terms for the 96/99= 49% for the 1% and the Life Safety Hazard Index is 370.

If Fiscal Year 2014 funds are not received, design and construction of the final remaining WRDA 96 and 99 sites will not be accomplished and monetary damages and potential loss of life may result due to a flood event.

The Average annual benefits (October 2010 price levels) are as follows:

Annual Benefits	Amount
Flood risk management	$54,328,000
Other (de-watering, debris removal, levee repair costs)	6,437,000
Total	$60,765,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Continue design of levee remediation on the WRDA 96/99 portion	$2,000,000
Continue risk management levee construction on the WRDA 96/99 portion	4,000,000
Continue design levee stability and seepage remediation to WRDA 96/99 portion	400,000
Continue GRR	111,000
Total	$6,511,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continuation of risk management levee construction, E&D during construction and S&A on the American River as authorized under WRDA 96/99	$2,500,000
Total	$2,500,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$14,391,000	

Pay 20 percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to 25 percent, as determined under Section 103 (m) of the WRDA 1996, as amended, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood risk management facilities.	57,825,000	$54,000
Total Non-Federal Costs	$72,216,000	$54,000

STATUS OF LOCAL COOPERATION: The Central Valley Flood Protection Board (CVFPB) is the non-Federal sponsor. The Project Cooperation Agreement (PCA) was executed in July 1998 for implementation of features authorized by WRDA 1996.

Amendment 1 to the PCA was executed in June 2003 which increased the project cost and extended the completion date due to the addition of WRDA 1999 levee work. Amendment 2 was executed in September 2006 and increased the total project cost and project completion date in accordance with EWDAA 2004. Amendment 3 was executed in July 2006 and authorized the non-Federal sponsor to accelerate the cash contribution. Amendment 4 was executed in July 2007 and amended the project scope in accordance with WRDA 1999 to add Mayhew, Howe Avenue, Jacob Lane and Natomas East Main Drainage Canal levees to the project scope. The total project cost was increased. The current non-Federal cost estimate of $72,216,000, which includes a cash contribution of $57,825,000, is an increase of $21,182,000 from the non-Federal cost estimate of $51,034,000 noted in the Project Cooperation Agreement, which includes a cash contribution of $47,800,000. The sponsor agrees with current costs and continues to be financially able to support the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $217,360,000 is an increase of $4,260,000 from the latest estimate $213,100,000 presented to Congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$1,168,000
Post Contract Award and Other Estimating Adjustments	3,092,000
Total	$4,260,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Supplemental Environmental Impact Statement/Environmental Impact Report (SEIS/EIR) was filed with the Environmental Protection Agency on March 8, 1996.

OTHER INFORMATION: Funds used to initiate preconstruction engineering and design of the common elements were allocated in FY 1996. Construction of the first contract on the lower American River levees was initiated in July 1998. WRDA 1996 remaining sites construction started in summer 2009 and is scheduled to be completed in FY 2015. WRDA 1999 remaining sites design will be completed in FY 2013, and construction is scheduled to be completed in FY 2015. Fish and wildlife mitigation costs are currently estimated at $3,773,000. To date seepage and stability remediation have been constructed on approximately 22 miles on the American River and 1 mile on the Sacramento River. Despite work completed and currently on-going, the city of Sacramento remains one of the communities most at risk for flooding nationwide.

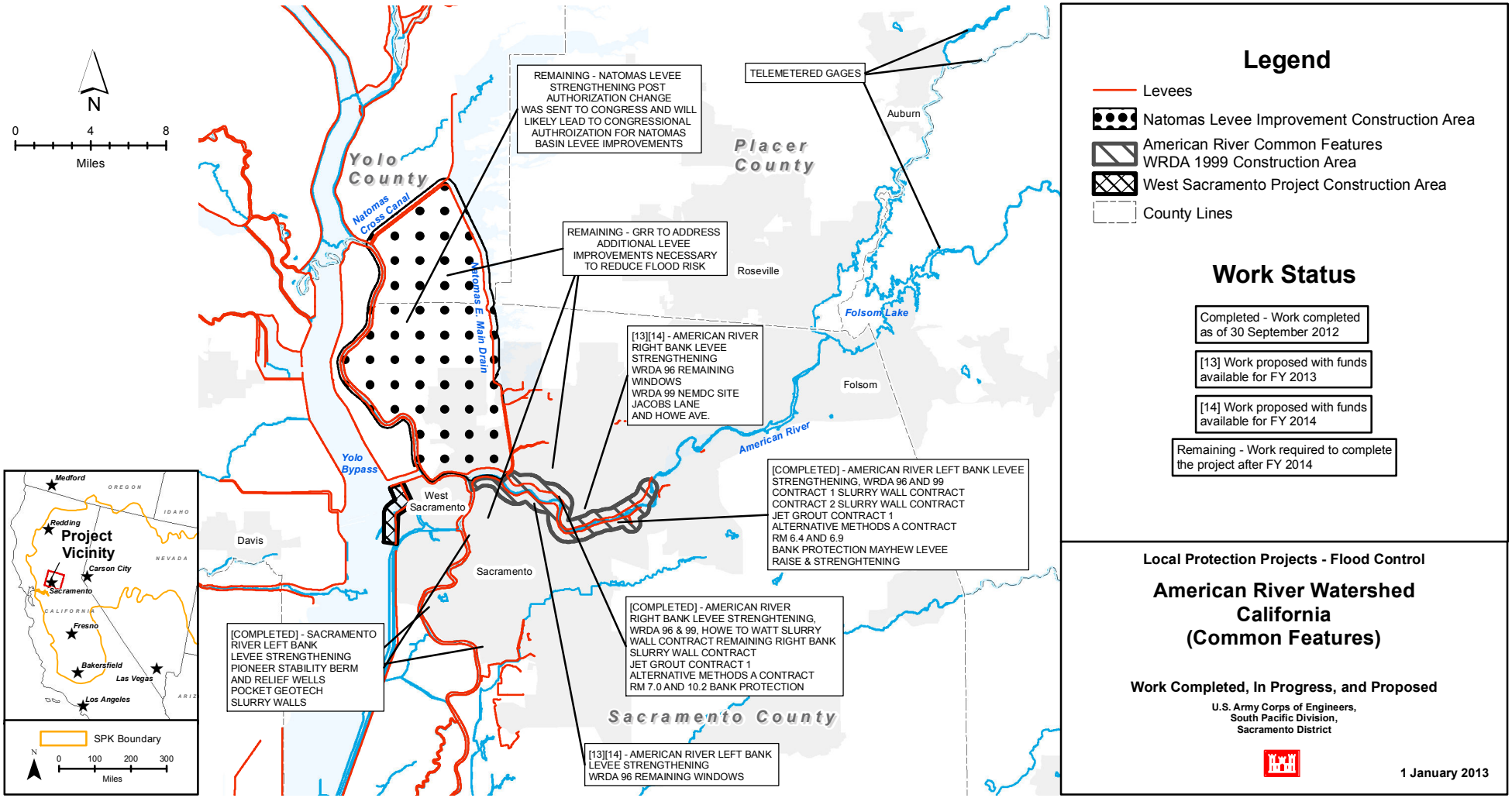
The American River Watershed Feasibility Report was completed in December 1991 and the Supplemental Information Report (SIR) was completed in March 1996. The SIR identified three candidate plans which would help reduce the flood risk facing Sacramento: modifying Folsom Dam and increasing the dedicated flood space; modifying Folsom Dam and the downstream system to allow increased objective releases; and constructing a detention dam upstream of Folsom Dam. In June 1996, the Chief of Engineers deferred a decision on a comprehensive flood risk management plan, but recommended that features common to all three plans be authorized as the first component of a comprehensive plan. WRDA 1996 authorized construction of the Common Features. Funds were appropriated in FY 1998 to initiate construction. Additional flood risk management improvements along the lower American River and Natomas Cross Canal were authorized by Section 366 of WRDA 1999 as part of the overall project. The cost of slurry wall construction authorized by WRDA 1996 has increased significantly due to increased slurry wall quantities, the technical requirement for the more costly jet grout construction method for slurry wall construction around bridges and deep utilities, and several high-cost contract modifications due to slurry leaks during construction. The cost of planning, engineering and design has also increased. Project reauthorization was required to increase the project cost estimate to complete most of the remaining WRDA 1996 and WRDA 1999 features.

OTHER INFORMATION (Continued)

The Second Addendum to the SIR, dated March 2002 and revised July 2002, serves as the decision document/PAC report. Based on this report, Section 129 of EWDAA, 2004 increased the authorized first cost to $205,000,000. A separate Natomas PAC Report decision document was prepared to address previously unknown levee under-seepage problems and levee deficiencies along the Sacramento River and in the Natomas Basin including the Natomas Cross Canal. The Natomas PAC Report was completed December 2010. Implementation of these features will require a new authorization for approximately $1,100,000,000 worth of levee improvements in the Natomas Basin portion of the city of Sacramento. The General Reevaluation Report (GRR) is addressing additional levee improvements and seepage and stability remediation on the Sacramento River below the American River, including the Pocket Area, and will likely result in the need for additional design and construction requiring new authorization.

Addressing this risk, GRR continues to evaluate additional levee improvement, along flooding sources adjacent to the city of Sacramento. Upon completion of the GRR, scheduled for FY 2014, and subsequent reauthorization, design and construction efforts will begin on these additional levee improvements to significantly reduce the flood risk for the city of Sacramento.

The 60% design M-CACES construction cost estimates for four construction contracts, prepared subsequent to the FY13 President's budget submission, are significantly higher than preliminary estimates, resulting in an additional requirement of $7.2M in Federal funding. These contracts are scheduled for award in the 4th quarter of FY13. The non-federal sponsors have committed to provide real estate certifications for all by Spring 2013. Delay in construction of these vital levee improvements will result in the Sacramento area being at continued flood risk. An updated cost estimate reflecting these increases has been prepared and is undergoing review prior to final approval.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0 4 8
Miles
REMAINING - NATOMAS LEVEE STRENGTHENING POST AUTHORIZATION CHANGE WAS SENT TO CONGRESS AND WILL LIKELY LEAD TO CONGRESSIONAL AUTHROIZATION FOR NATOMAS BASIN LEVEE IMPROVEMENTS
TELEMETERED GAGES
Yolo County
Placer County
Natomas Cross Canal
REMAINING - GRR TO ADDRESS ADDITIONAL LEVEE IMPROVEMENTS NECESSARY TO REDUCE FLOOD RISK
Roseville
Auburn
Natomas E. Main Drain
Folsom Lake
[13][14] - AMERICAN RIVER RIGHT BANK LEVEE STRENGTHENING WRDA 96 REMAINING WINDOWS WRDA 99 NEMDC SITE JACOBS LANE AND HOWE AVE.
Folsom
Yolo Bypass
American River
West Sacramento
[COMPLETED] - AMERICAN RIVER LEFT BANK LEVEE STRENGTHENING, WRDA 96 AND 99 CONTRACT 1 SLURRY WALL CONTRACT CONTRACT 2 SLURRY WALL CONTRACT JET GROUT CONTRACT 1 ALTERNATIVE METHODS A CONTRACT RM 6.4 AND 6.9 BANK PROTECTION MAYHEW LEVEE RAISE & STRENGHTENING
Davis
Sacramento
[COMPLETED] - AMERICAN RIVER RIGHT BANK LEVEE STRENGHTENING, WRDA 96 & 99, HOWE TO WATT SLURRY WALL CONTRACT REMAINING RIGHT BANK SLURRY WALL CONTRACT JET GROUT CONTRACT 1 ALTERNATIVE METHODS A CONTRACT RM 7.0 AND 10.2 BANK PROTECTION
[COMPLETED] - SACRAMENTO RIVER LEFT BANK LEVEE STRENGTHENING PIONEER STABILITY BERM AND RELIEF WELLS POCKET GEOTECH SLURRY WALLS
Sacramento County
[13][14] - AMERICAN RIVER LEFT BANK LEVEE STRENGTHENING WRDA 96 REMAINING WINDOWS
Project Vicinity
Medford
Redding
Carson City
Sacramento
Fresno
Bakersfield
Las Vegas
Los Angeles
SPK Boundary
0 100 200 300
Miles
Legend
Levees
Natomas Levee Improvement Construction Area
American River Common Features WRDA 1999 Construction Area
West Sacramento Project Construction Area
County Lines
Work Status
Completed - Work completed as of 30 September 2012
[13] Work proposed with funds available for FY 2013
[14] Work proposed with funds available for FY 2014
Remaining - Work required to complete the project after FY 2014
Local Protection Projects - Flood Control
American River Watershed California (Common Features)
Work Completed, In Progress, and Proposed
U.S. Army Corps of Engineers, South Pacific Division, Sacramento District
1 January 2013

APPROPRIATION TITLE: Construction – Local Protection, Flood Risk Management

PROJECT: American River Watershed (Folsom Dam Modifications), California (Continuing)

LOCATION: The project is located in Placer, El Dorado and Sacramento Counties, California and includes the North, Middle and South Forks of the American River that flow westward into Folsom Lake. The outflow of the lake through Folsom Dam then flows through the city of Sacramento and into the Sacramento River. The system includes the Folsom Dam and Reservoir, located on the American River, about 29 miles upstream of the city of Sacramento, California. The American River watershed drains about 2,100 square miles northeast of Sacramento.

DESCRIPTION: Engineering evaluations indicated that the level of flood protection along much of the American River provides a level less than a 1% chance of exceedence annually. Several flood control projects have been authorized for construction for the American River to reduce the risk of flooding to Sacramento. Currently, Folsom Dam is designed to release up to 115,000 cubic feet per second (cfs) during flood operations, however the existing outlets limit releases to 36,000 cfs until approximately one half of the reservoir's flood control space is filled. Additional work is scheduled for Folsom Dam and related facilities to mitigate flood risk. Authorized work for Folsom Dam Modifications (aka Joint Federal Project - JFP), which will allow releases much earlier, consists of construction of a new auxiliary spillway and modifying the flood control storage space in Folsom Reservoir to a variable space ranging from 400,000 to 600,000 acre-feet. The Joint Federal Project is a joint effort between the US Bureau of Reclamation (USBR) and the US Army Corps of Engineers (USACE). The USBR completed their 20% of the work under their Dam Safety program in January 2011. USACE will complete the remaining 80%. Details of the plan are described in the Post Authorization Change (PAC) Report – American River Watershed Project, Folsom Dam Modifications and Folsom Dam Raise Projects.

AUTHORIZATION: Water Resources Development Act, Pub. L. 106-53, § 101(a)(6), 113 Stat. 269 (1999); Water Resources Development Act, Pub. L. 110-114, § 3029(b), 121 Stat. 1041 (2007).

REMAINING BENEFIT-REMAINING COST RATIO: 2.5 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 2.2 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 4.4 to 1 at 7-5/8 percent.

BASIS OF BENEFIT-COST RATIO: Folsom Dam Modifications – Benefits and costs were updated in the Post Authorization Change Report (PAC) dated March 2007 and finalized in the Economic Reevaluation Report (ERR) dated February 2009. Benefits and costs were updated in the American River Watershed Economic Update dated June 2011.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Folsom Dam Modifications						
Estimated Federal Cost		$513,369,000		Entire Project	12	TBD
Estimated Non-Federal Cost		251,631,000				
Cash Contribution	$267,750,000					
Other Costs	(16,119,000) 8/					
Total		$765,000,000				

		ACCUM PCT OF EST FED COST	PHYSICAL DATA
Allocations to 30 September 2010	$119,075,468		Authorized -
Allocation for FY 2011	58,029,472		Construct auxiliary spillway
Allocation for FY 2012	31,000,000		
Conference Allowance for FY 2013	86,700,000 5/		
Allocations through FY 2013	294,804,940 1/ 2/ 3/ 6/	57	
Estimated Unobligated Carry-In Funds	0 4/		
President's Budget for FY 2014	66,400,000	70	
Programmed Balance to Complete after FY 2014	152,164,060 7/ 8/		
Un-programmed Balance to Complete after FY 2014	$ 0		

1/ $6,285,000 reprogrammed to the project.
2/ $320,000 rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A.
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.
6/ PED costs of $6,657,868 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construction these features.
8/ Sponsor credit approved on February 22, 2010 by ASA(CW) for $16,119,000.

JUSTIFICATION: This flood risk management project addresses significant risk to human safety in accordance with the U.S. Army Corps of Engineers performance-based guidelines for the construction account. Folsom Dam and Reservoir are key features for flood risk management for Sacramento. Folsom Dam and Reservoir has a capacity of 975,000 acre-feet, which includes a minimum of 400,000 acre-feet of space seasonally dedicated to the mitigation of flood risk. Significant rainfall in recent years has filled Folsom Lake and necessitated record releases in excess of design flow downstream. The levees along the American River are designed to accommodate releases from Folsom Dam of up to 115,000 cfs. Downstream levees would likely fail with sustained flows above this level. Levee failure along the lower American River and Sacramento River could result in flooding of more than 100,000 acres, affecting approximately 900,000 residents,110,000 structures, with damages of up to $58 billion, depending on the magnitude of the event. The authorized Folsom Dam Modifications project would construct an auxiliary spillway. This would further reduce the risk of flood damage to about a 1 in 156 chance in any given year.

The auxiliary spillway also addresses dam safety issues. The JFP construction satisfies the USBR's significant dam safety issues at Folsom Dam. This is the USBR's top dam safety issue in the nation. Without the JFP, the USBR has determined a probable maximum flood would cause catastrophic failure of the Folsom Dam and many lives would be lost. Emergency response and regional/national economic disruption costs associated with flooding in Sacramento are enormous. There is limited egress and ingress across Sacramento and American Rivers and there would be a disruption of statewide drinking water supplies. The Life Safety Hazard Index is 370.

If Fiscal Year 2014 funds are not received: schedule commitments cannot be met, with adverse impact to USBR's dam safety mission and USACE Flood Risk Management mission associated with completion of the Joint Federal Project; Phase III (Control Structure) and Phase IV (Approach Channel and Chute & Stilling Basin) contracts would have to be terminated for convenience; and Control Structure contract would be terminated putting Sacramento area at further risk of catastrophic flooding and increasing risk of potential failure of Folsom Dam from Probable Maximum Flood storm.

Average annual benefits (October 2010 price levels) are as follows:

Annual Benefits	Amount
Flood risk management	$120,829,000
Other (de-watering, debris removal, levee repair costs)	12,310,000
Total	$133,139,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Continue construction of the control structure	$6,034,000
Design adjustments and schedule acceleration on the control structure	6,610,000
Continue design of approach channel and chute and stilling basin	2,200,000
Continue the Water Control Manual (formerly Permanent Operations Study)	3,055,000
Award contract to construct the chute and stilling basin and approach channel to spillway	68,835,000
Total	$86,734,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Continue construction of approach channel and chute and stilling basin	$51,400,000
S&A to support control structure continuing construction contract	3,600,000
Mod to Phase III contract	6,000,000
Bulkhead Gate Installation	2,400,000
Continue Permanent Operations Study	3,000,000
Total	$66,400,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
<u>Folsom Dam Modifications</u>		
Pay 35 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	$267,750,000 9/	$800,000 10/
Total Non-Federal Costs	$267,750,000	$800,000 10/

9/ Includes $16,119,000 sponsor credit approved February 22, 2010 by ASA.
10/ The operation and maintenance (O&M) would continue to be performed by the USBR. An initial cost-sharing agreement has been negotiated between the Sacramento Area Flood Control Agency (SAFCA) and USBR to pay the portion of O&M costs related to the new flood control features. Subsequent agreements are to be negotiated as project information is further defined.

STATUS OF LOCAL COOPERATION: The Central Valley Flood Protection Board (CVFPB) and Sacramento Area Flood Control Agency (SAFCA) are the non-Federal sponsors for the Folsom Dam Modifications. The PCA for the Folsom Dam Modifications was executed March 30, 2004 and amended August 24, 2009 to incorporate Section 3029 of WRDA 2007. A second amendment to the Folsom Dam Modifications PCA addressing the allocation of sponsor credits was approved February 22, 2010. A third amendment to the PCA, was signed March 4, 2012 and allows non-Federal sponsor to accelerate funds.

The current non-Federal cost estimate of $251,631,000, which includes a cash contribution of $267,750,000 and credit of $16,119,000, is a decrease of $41,269,150,000 from the non-Federal cost estimate of $292,900,000 noted in the Project Cooperation Agreement, which includes a cash contribution of $292,900,000. The sponsor agrees with current costs and continues to be financially able to support the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $513,369,000 is a decrease of $28,031,000 from the latest estimate $541,400,000 presented to Congress (FY 2013). This change includes the following items.

Item	Amount
Post Contract Award and other Estimating Adjustments (contingencies reduced based on Cost Schedule Risk Analysis)	($28,031,000)

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: Folsom Dam Modifications/Folsom Dam Raise (Joint Federal Project) – The USBR, with cooperation from the Corps, prepared an EIS/EIR, which was finalized in March 2007. USBR and the Corps signed a joint Record of Decision (ROD) on May 3, 2007. A second EIS/EIR document that is supplemental to the original EIS/EIR, is currently underway. This supplemental EIS/EIR will address the proposed construction actions associated with the cutoff wall, approach channel and spur dike stages of Phase 4 of the project. A ROD is anticipated in 2013.

OTHER INFORMATION: Funds used to initiate preconstruction engineering and design on the Folsom Dam Modifications were allocated in FY 2000. Funds to initiate construction were appropriated in FY 2001. Fish and wildlife mitigation costs are currently not expected to be significant.

The American River Watershed Feasibility Report was completed in December 1991 and the Supplemental Information Report (SIR) was completed in March 1996. The SIR identified three candidate plans which would help reduce the flood risk facing Sacramento: modifying Folsom Dam and increasing the dedicated flood space; modifying Folsom Dam and the downstream system to allow increased objective releases; and constructing a detention dam upstream of Folsom Dam. In June 1996, the Chief of Engineers deferred a decision on a comprehensive flood control plan, but recommended that features common to all three plans be authorized as the first component of a comprehensive plan.

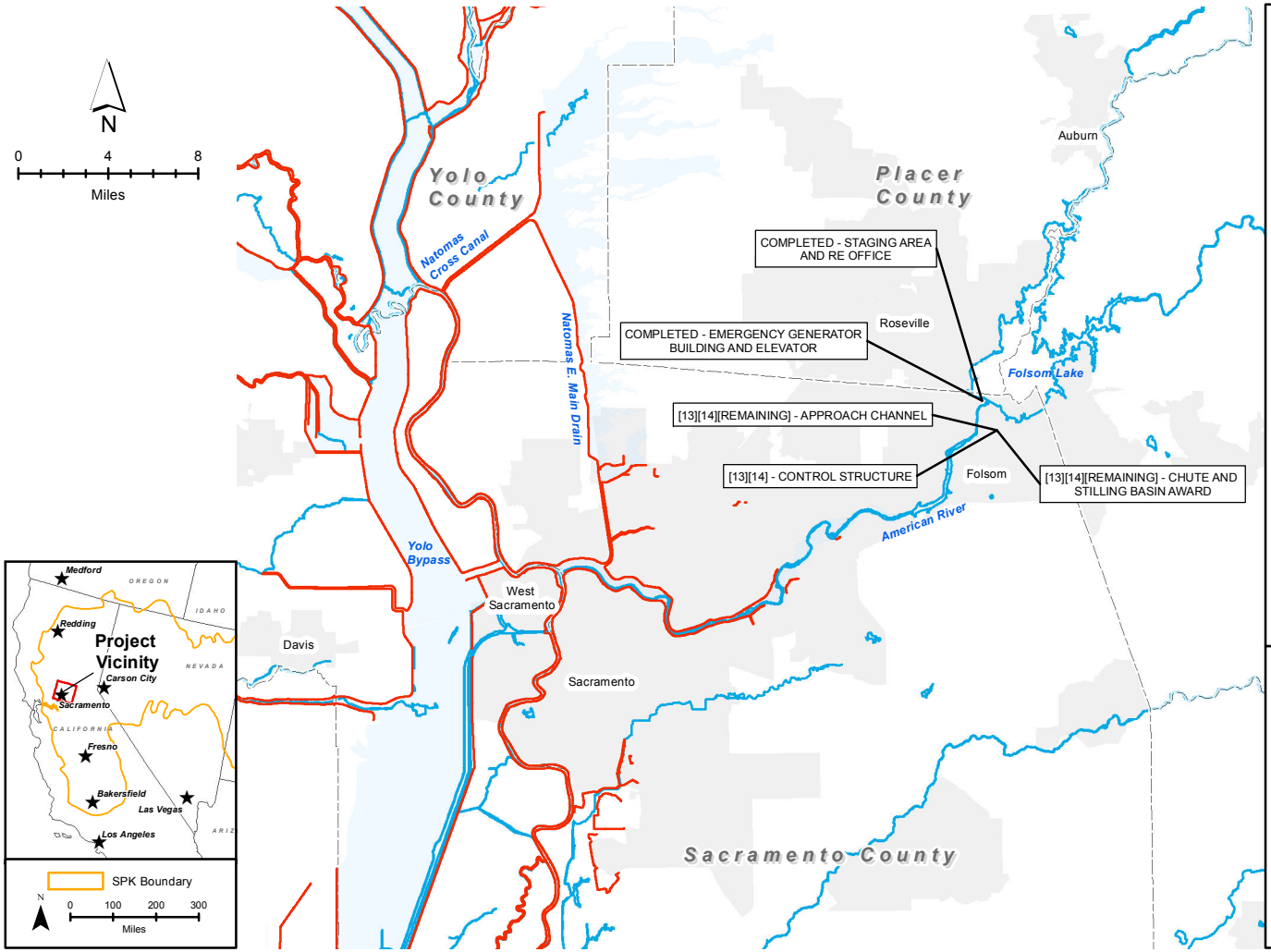
SAFCA prepared the Folsom Dam Modification Report New Outlets Plan dated March 1998 (SAFCA Outlet Report), which identified some proposed changes to the Folsom Dam Modification Plan described in the 1996 SIR. The 1996 SIR as modified by SAFCA Outlet Report was the basis for the project authorized under WRDA 1999. The Limited Reevaluation Report, dated November 2003, documents the 1996 SIR plan as modified by the SAFCA Outlet Report. Information in FY 2007 budget submittal indicated that the project, as originally designed, would exceed the maximum authorized cost per Section 902 of WRDA 1986. Action was taken to conduct engineering evaluations and to develop a Post Authorization Change and Engineering Documentation Report (PAC/EDR) document recommending a functionally equivalent performance project that involves a new gated auxiliary spillway on the left embankment of Folsom Dam. USACE PAC Report and U.S. Bureau of Reclamation Mod Report recommended a Joint Federal Project, which addresses both the Dam Safety and the Flood Risk Management issues. During PAC and Mod approval process, both ASA(CW) and ASI(WS) made strong commitments to each other to make the JFP a top priority and expeditiously design and construct the project, because of the significant property and loss of life risks and the efficiencies of both agencies working together.

OTHER INFORMATION (Continued)

Further, both agencies recognized that neither agency could or should move forward without a strong commitment to build the project together. Both the PAC and Mod Reports were approved by OMB September 2007. WRDA 2007 authorized construction in accordance with the PAC at a total cost of $683,000,000 (USACE portion) and Congress encouraged USACE and USBR to move forward expeditiously.

Engineering and design effort on the Folsom Dam Modifications portion of the JFP will continue through FY 2013. Completion of the auxiliary spillway is slated for year 2017.USBR started construction of the JFP on January 11, 2008 and completed their portion of the project in January 2011.

Additional funds of $12,300,000 are required in FY 2013 to award a control structure recovery modification. This modification does not increase overall project cost nor is it driven by a schedule delay. The modification realigns funding stream enabling early accomplishment of planned work which will allow meeting the committed completion date.



Legend

Levees

Work Status

[Completed] - Work completed as of 30 September 2012

[13] - Work proposed with funds available for FY 2013

[14] - Work proposed with funds available for FY 2014

[Remaining] - Work required to complete the project after FY 2014

Local Protection Projects - Flood Control

American River Watershed California (Folsom Dam Modifications)

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District

1 January 2013

APPROPRIATION TITLE: Construction – Local Protection, Flood Risk Management

PROJECT: American River Watershed, Folsom Dam Raise – Bridge, California (Continuing)

LOCATION: The project is located in Placer, El Dorado and Sacramento Counties and is comprised of the North, Middle and South Forks of the American River that flow westward into Folsom Lake. The outflow of the lake through Folsom Dam then flows through the city of Sacramento and into the Sacramento River. The system includes the Folsom Dam and Reservoir, located on the American River, about 29 miles upstream of the city of Sacramento, California. The American River watershed drains about 2,100 square miles northeast of Sacramento.

DESCRIPTION: Engineering evaluations indicated that the level of flood protection along much of the American River provides a level less than a 1% chance of exceedence annually. Several flood control projects have been authorized for construction for the American River to reduce the risk of flooding to Sacramento. Currently, Folsom Dam is designed to release up to 115,000 cubic feet per second (cfs) during flood operations, however the existing outlets limit releases to 36,000 cfs until approximately one half of the reservoir's flood control space is filled. Additional work is scheduled for Folsom Dam and related facilities to mitigate flood risk. The authorized project to raise Folsom Dam 3.5 feet includes raising related dikes, right and left dams, Morman Island Auxiliary Dam, replacement/modification of 3 emergency spillway tainter gates, construction of a permanent bridge downstream of Folsom Dam, and three ecosystem restoration projects, including the temperature control shutters project and two downstream sites. The Joint Federal Project is a joint effort between the US Bureau of Reclamation (USBR) and the US Army Corps of Engineers (USACE). USBR will complete 20% of the work under their Dam Safety program with the USACE completing the remaining 80%. Details of the plan are described in the Post Authorization Change (PAC) Report – American River Watershed Project, Folsom Dam Modifications and Folsom Dam Raise Projects.

AUTHORIZATION: Energy and Water Development Appropriations Act, Pub. L. 108-137, §§ 128, 134, 117 Stat. 1827 (2004); Energy and Water Development Appropriations Act, Pub. L. 109-103, 119 Stat. 2247 (2006); Energy and Water Development Appropriations Act, Pub. L. 110-161, § 130, 121 Stat. 1937, 1947 (2008); Omnibus Appropriations Act 2009, Pub. L. 111-8, § 109, 123 Stat. 524 (2009)

REMAINING BENEFIT-REMAINING COST RATIO: 2.4 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 3.4 to 1 at 6-7/8 percent (2001)

BASIS OF BENEFIT-COST RATIO: Folsom Dam Raise – Benefits and costs were updated in the American River Watershed Common Features Project (WRDA 1996/1999) Economic Update dated June 2011. The Folsom Dam Modifications must be completed to realize full benefits. The Dam Raise is the basis for future benefits and the basis of the BCR the bridge was needed to mitigate traffic impacts from construction.

SUMMARIZED FINANCIAL DATA					STATUS (1 JAN 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Folsom Dam Raise							
Estimated Federal Costs		$118,482,000			Folsom Dam Raise	34 8/	TBD
Estimated Non-Federal Costs		63,578,000					
Cash Contribution	$62,083,000						
Other Costs	1,495,000						
Total Folsom Dam Raise		$182,060,000					
Folsom Bridge							
Estimated Federal Costs		$ 89,717,000	9/		Folsom Dam Bridge	95	Jun 2009
Estimated Non-Federal Costs		46,330,000			Mitigation		TBD
Cash Contribution	$33,263,000						
Other Costs	13,067,000						
Total Folsom Bridge		$136,047,000					
Project Summary							
Estimated Federal Costs		$208,199,000					
Estimated Non-Federal Costs		109,908,000					
Cash Contribution	$95,346,000						
Other Costs	14,562,000						
Total Estimated Project Costs		$318,107,000					
				ACCUM PCT OF EST FED COST	PHYSICAL DATA		
Allocations to 30 September 2010		$117,557,286					
Allocation for FY 2011		328,963			Authorized FOLSOM DAM RAISE -		
Allocation for FY 2012		1,700,000			Raise Folsom Dam 3.5 feet, wing walls & dikes		
Conference Allowance for FY 2013		5,100,000	5/		Construct Bridge		
Allocations through FY 2013		124,686,249	1/ 2/ 3/ 6/	60	Accomplish ecosystem restoration		
Estimated Unobligated Carry-In Funds		0	4/				
President's Budget for FY 2014		3,150,000		61			
Programmed Balance to Complete after FY 2014		80,362,751	7/				
Un-programmed Balance to Complete after FY 2014		$ 0					

SUMMARIZED FINANCIAL DATA (Continued)

1/ $860,000 reprogrammed to the project.
2/ $241,000 rescinded from the project.
3/ $170,000 transferred to the Flood Control and Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A.
5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013. however only $2,100,000 can be used (see OTHER INFORMATION).
6/ PED costs of $16,095,636 are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.
8/ Reflects physical completion for Folsom Dam Raise portion only.
9/ Temporary bridge is now reflected under Folsom Bridge cost only. Funds of $48,300,000 are authorized to be appropriated for the permanent bridge and not subject to cost sharing requirements with non-Federal interests (see OTHER INFORMATION).

JUSTIFICATION: This flood risk management project addresses significant risk to human safety in accordance with the USACE performance-based guidelines for the construction account. Folsom Dam and Reservoir are key features for flood risk management for Sacramento. Folsom Dam and Reservoir has a capacity of 975,000 acre-feet, which includes a minimum of 400,000 acre-feet of space seasonally dedicated to the mitigation of flood risk. Significant rainfall in recent years has filled Folsom Lake and necessitated record releases in excess of design flow downstream. The levees along the American River are designed to accommodate releases from Folsom Dam of up to 115,000 cfs. Downstream levees would likely fail with sustained flows above this level. Levee failure along the lower American River and Sacramento River could result in flooding of more than 100,000 acres, affecting approximately 900,000 residents, with damages of up to $58 billion, depending on the magnitude of the event. The Folsom Dam Raise Project would further reduce the risk of flood damage to about a 1 in 185 chance in any given year. The Population at Risk is 900,000, the depth of flooding is 10 feet and the risk warning time is 12 hours. Emergency response and regional/national economic disruption costs associated with flooding in Sacramento are enormous. Limited egress and ingress across the Sacramento and American rivers and disruption of statewide drinking water supplies. The Life Safety Hazard Index is 370.

If Fiscal Year 2014 funds are not received, the following will not be accomplished: Folsom Dam Raise design and National Environmental Policy Act coordination of Environmental Statement/Environmental Assessment; construction contract award in FY 2015 providing additional flood protection to the city with the No. 1 flood risk in the nation; advance design of follow-on dam raise elements; and mitigation monitoring for the bridge, potentially resulting in jeopardy biological opinions from environmental resource agencies.

Average annual benefits (October 2010 price levels) are as follows:

Annual Benefits	Amount
Flood risk management	$28,800,000
Other (de-watering, debris removal levee repair costs)	2,158,000
Total	$30,958,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Continue design on project features for the Folsom Dam Raise	$1,812,000
Continue ecosystem mitigation monitoring	462,000
Total	$2,274,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Folsom Dam Raise	
Continue design on project features (Dam Raise)	$3,000,000
Folsom Dam Bridge	
Mitigation and monitoring	150,000
Total	$3,150,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
<u>Folsom Dam Raise – Raise Component</u>		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$ 1,495,000	
Pay 35 percent of the costs allocated to flood control to bring non-Federal share to 35 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	42,255,000	<u>10</u>/
Pay 33 percent of the costs allocated to ecosystem restoration to bring non-Federal share to 35 percent.	19,828,000	
Total Folsom Dam Raise Component	$63,578,000	

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Raise – Bridge Component		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas (City of Folsom).	$ 7,931,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project (City of Folsom).	5,136,000	
City of Folsom's share of costs associated with bridge construction.	22,941,000	
Pay 35 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities (refers to temporary portion of the bridge).	10,322,000	
Total Folsom Bridge Component	$ 46,330,000	
Total Folsom Dam Raise (including Bridge) Non-Federal Costs	$109,908,000	

10/ The operation and maintenance (O&M) would continue to be performed by USBR. An initial cost-sharing agreement would be negotiated between SAFCA and USBR to pay the portion of O&M costs related to the new flood control features. Amount is for both Folsom Dam Modifications (JFP) and Folsom Dam Raise.

STATUS OF LOCAL COOPERATION: The Central Valley Flood Protection Board (CVFPB) and the Sacramento Area Flood Control Agency (SAFCA) are the non-Federal sponsors for the Folsom Dam Raise. The Project Partnership Agreement (PPA) for the Dam Raise is scheduled for execution in FY 2013. The non-Federal sponsors are financially capable and willing to contribute the non-Federal share. The non-Federal sponsors have also agreed to make all required payments concurrently with project construction.

The city of Folsom is the non-Federal sponsor for the Folsom Bridge Project. The PCA was executed November 22, 2006.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $208,199,000 is a decrease of $14,898,000 from the latest estimate $223,097,000 presented to Congress (FY 2013). This change includes the following items.

Item	Amount	
Cost Schedule Risk Analysis Contingency	$26,370,000	
Post Contract Award and Other Estimating Adjustments (Folsom Bridge)	(41,268,000)	11/
Total	($14,898,000)	

11/ Cost for temporary bridge had previously inadvertently been included under both Folsom Dam Raise and Folsom Bridge components.

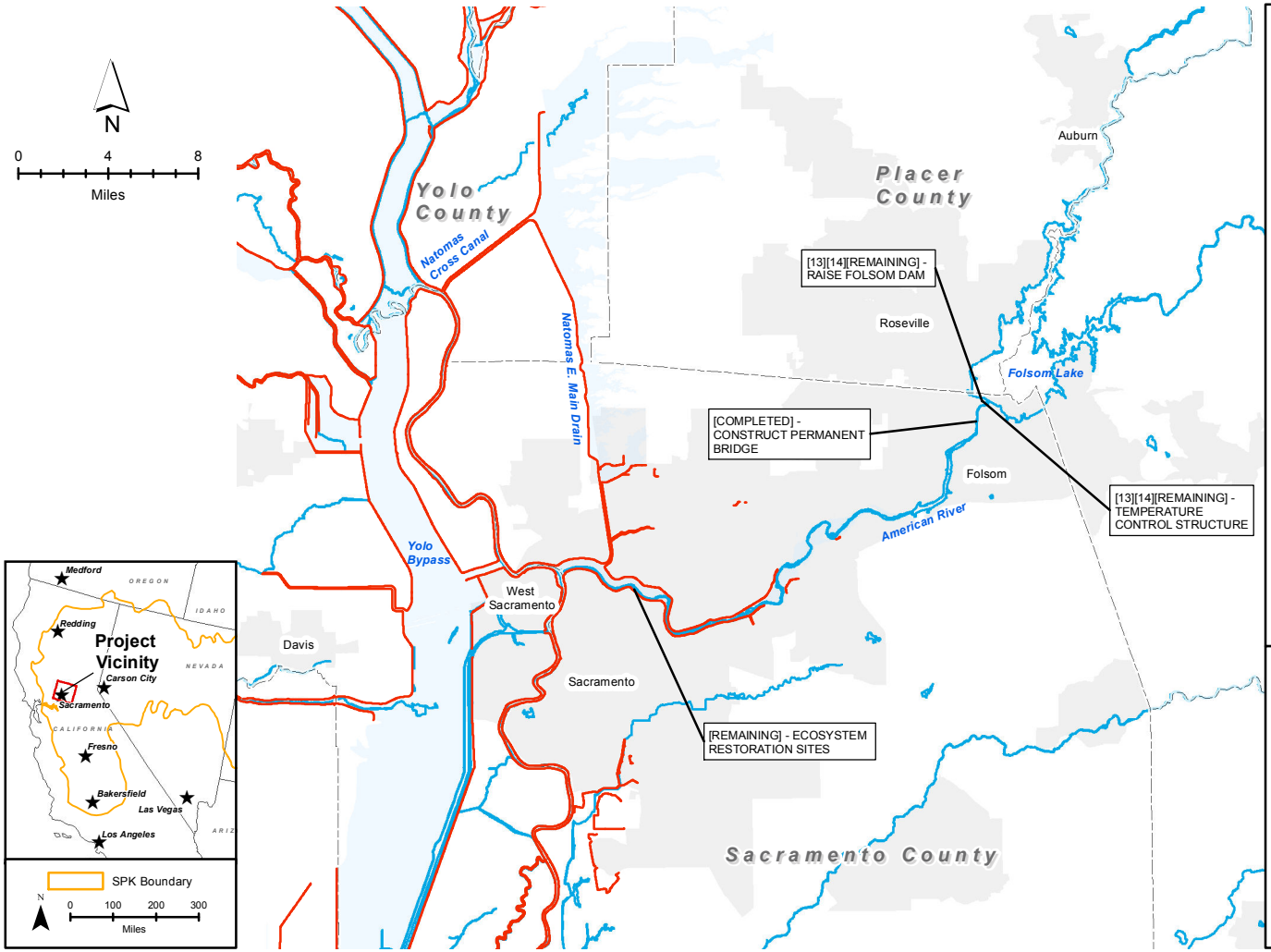
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Folsom Dam Modifications/Folsom Dam Raise (Joint Federal Project) – The USBR, with cooperation from the Corps, prepared an EIS/EIR, which was finalized in March 2007. USBR and the Corps signed a joint Record of Decision (ROD) on May 3, 2007.

OTHER INFORMATION: Funds used to initiate preconstruction engineering and design for the American River Watershed project were allocated in FY 1992. The Long Term Study (Feasibility Report) for the entire American River Watershed was completed in February 2002. The Chief's Report, dated 5 November 2002, was followed by the Division Engineer's Public Notice issued on 22 March 2003. Funds to initiate construction were appropriated in FY 2004. The Post Authorization Change (PAC) Report was submitted to OMB on 7 May 2007, recommending the Raise design be refined from 7-foot raise to a 3.5-foot raise. Fish and wildlife mitigation costs are currently not expected to be significant.

The American River Watershed Feasibility Report was completed in December 1991 and the Supplemental Information Report (SIR) was completed in March 1996. The SIR identified three candidate plans which would help reduce the flood risk facing Sacramento: modifying Folsom Dam and increasing the dedicated flood space; modifying Folsom Dam and the downstream system to allow increased objective releases; and constructing a detention dam upstream of Folsom Dam. In June 1996, the Chief of Engineers deferred a decision on a comprehensive flood control plan, but recommended that features common to all three plans be authorized as the first component of a comprehensive plan.

Folsom Bridge – Total project cost (including only the temporary bridge component) was authorized at $257,300,000 in EWDAA, 2004, P.L. 108-137, Section 128, for both Folsom Dam Raise and Folsom Bridge. Section 128 also modified the cost sharing of the permanent bridge feature and required status reports to Congress. Sec. 128(b) of EWDAA, 2006, P.L. 109-103 amended Sec. 134 of P.L. 108-137 by authorizing "to be appropriated to the Secretary of the Army $30,000,000 for the construction of the permanent bridge described in section 128(a) of P.L. 109-103, above the $36,000,000 provided for in the recommended plan for bridge construction. The $30,000,000 shall not be subject to cost sharing requirements with non-Federal interests." Sec. 109 of the Omnibus Appropriations Act, 2009, P.L. 111-8 further amended Sec. 134 of P.L. 108-137, as amended by section 128(b) of P.L. 109-103, by striking "$30,000,000" wherever it appears and inserting "$48,300,000" in lieu thereof. The requirement for FY 2013 for ongoing mitigation is $450,000.

The PAC Report recommended the Raise design be refined from 7-foot raise to a 3.5-foot raise. The construction contract for the temperature control shutters was shelved in order to focus on the flood risk management portion of this project, thereby reducing the FY 2013 requirement by $20,700,000 from the last report. Additionally, due to ensuring this project does not conflict with the Joint Federal Project's schedule for completion and incorporating design changes to the Raise (modifying the existing emergency gates rather than replacing them), the requirement for FY 2013 was decreased from $5,100,000 to $2,100,000.



Legend

Levees

Work Status

[Completed] - Work completed as of 30 September 2012

[13] - Work proposed with funds available for FY 2013

[14] - Work proposed with funds available for FY 2014

[Remaining] - Work required to complete the project after FY 2014

Local Protection Projects - Flood Control

American River Watershed California (Folsom Dam Raise and Bridge)

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District

1 January 2013

APPROPRIATION TITLE: Construction - Local Protection (Ecosystem Restoration)

PROJECT: Hamilton City, California (New Start)

LOCATION: Hamilton City is located along the west bank of the Sacramento River in Glenn County, California about 85 miles north of the City of Sacramento. The project area and town are bounded on the east by the Sacramento River, and to the west by the Glenn Colusa Canal. The area lies north of existing Sacramento River levees, and therefore, is unprotected by the same. The project boundaries extend about two miles north and six miles south of Hamilton City.

DESCRIPTION: The Hamilton City feasibility study was accomplished as part of the Central Valley Integrated Flood Management Study (formerly Sacramento and San Joaquin River Basins Comprehensive Study) with the State of California as the non-Federal sponsor. This project provides an example of an integrated, multiple-purpose project developed in accordance with existing USACE policy, which can serve as a model for other projects. The project will construct a setback levee about 6.8 miles long and degrade an existing private levee, actively restoring 1,145 acres of riparian woodland, 261 acres of riparian shrub, and 70 acres of floodplain meadow now cut off by that levee. To accomplish ecosystem restoration, most of the existing levee will be removed to reconnect the river to the floodplain and allow for overbank flooding. In areas where the existing levee reduces velocities of the Sacramento River, the levee will remain in place. The new setback levee will begin 2 miles north of Hamilton City. It will tie into high ground near the end of the existing levee to prevent flows greater than 250 year event from wrapping around the setback levee and over County Road 203 and into populated areas. The setback levee will run SE along County Road 203 then turn easterly and run parallel to the Sacramento River for about 1,300 feet. A seepage berm will be constructed on the landside of the setback levee at Dunning Slough. The levee will have a 90 percent reliability of passing the 75 year event. At Highway 32, the levee will turn east and run parallel to the highway until tying into the approach at Gianella Bridge. The highway will not need to be raised, but rock riprap will be placed to protect the levee embankment and bridge from floodwaters. South of Highway 32, the alignment follows the existing levee adjacent to Irvine Finch River Access. South of this access, the levee will be aligned away from the river to open up the floodplain. The alignment will cut across a portion of Dunning Slough and provide protection to the Hamilton City wastewater treatment plant. South of Dunning Slough, the alignment will follow the western edge of the habitat restoration area before turning east and merging with the southern end of the existing levee at Road 23. As the levee turns east, the levee height will gradually decrease from 9 feet to approximately 6 feet. At this point the new setback levee will transition into a “training dike”. This height reduction will avoid negative hydraulic effects to downstream property owners. The training dike continues a mile south of Road 23, running west of the USFWS boundary. This project will manage flood risk for the town of Hamilton City and adjacent agricultural lands while providing significant habitat acreage in the floodplain.

AUTHORIZATION: Water Resources Development Act of 2007, Pub. L. 110-114, § 100(8), 121 Stat. 1049, 1050 (2007)

REMAINING BENEFIT-REMAINING COST RATIO: N/A

TOTAL BENEFIT-COST RATIO: Hamilton City is a multiple-purpose flood risk management and ecosystem restoration project. The project was formulated to maximize use of integrated “joint” features (features that produce both flood risk management and ecosystem restoration benefits). During formulation a separable cost-remaining benefit analysis was performed to separate out costs associated with features that produce separable or joint benefits. The project will provide restoration benefits of 888 average annual habitat units (AAHUs) and average annual flood risk management benefits of $521,000 (2012 prices). This project reasonably maximizes total ecosystem restoration and flood risk management benefits compared to costs. (See Other Information)

BASIS OF BENEFIT-COST RATIO: Project justification was based on flood risk management and ecosystem restoration, as described in the Final Feasibility Report for Hamilton City Flood Damage Reduction and Ecosystem Restoration, California, Project dated July 2004 at October 2003 price levels, and Chief's Report dated 22 December 2004.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$34,100,000		Entire Project	0	TBD
Estimated Non-Federal Cost		18,300,000				
Cash Contributions	$ 1,180,000					
Other Costs	17,120,000					
Total Estimated Project Cost		$52,400,000				
Allocations to 30 September 2010		$ 2,822,000				
Allocation for FY 2011		0				
Allocation for FY 2012		0				
Conference Allowance for FY2013		0				
Allocations through FY 2013		2,822,000	1/ 2 / 3/ 5/	19		
Estimated Unobligated Carry-In Funds		0	4/			
President's Budget for FY 2014		15,000,000		52		
Programmed Balance to Complete after FY 2014		23,778,000				
Un-programmed Balance to Complete after FY 2014		$ 0				

1/ $140,000 reprogrammed to the project.
2/ $2,000 rescinded from the project.
3/ $0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0.

5/ PED costs of $2,822,000 are included in this amount.

PHYSICAL DATA: The project will construct a setback levee about 6.8 miles long and degrade an existing private levee, actively restoring 1,145 acres of riparian woodland, 261 acres of riparian shrub, and 70 acres of floodplain meadow now cut off by that levee. A seepage berm will be constructed on the landside of the setback levee at Dunning Slough.

JUSTIFICATION: Project justification was based on both flood risk management and ecosystem restoration. The project was formulated to maximize use of integrated “joint” features (features that produce both flood risk management and ecosystem restoration benefits). A separable cost-remaining benefit analysis was performed to separate out costs associated with features that produce separable and joint benefits. For the ecosystem component ($47.2 million) over 95% of the Sacramento River’s floodplains (riparian and wetland habitats) have been lost due to development and agriculture. This project will restore approximately 1,480 acres of floodplain habitat with all the land between an existing levee and the new setback levee restored to a natural floodplain. A variety of habitat types will be restored to include riparian forest and scrub, oak savannah, and grassland communities. Restoration of this flood plain will benefit the recovery of eight federally listed or proposed species in the area. This includes winter-run Chinook salmon, steelhead trout, Valley elderberry longhorn beetle, and Swainson's hawk. The restoration will provide vital habitat (nesting, foraging, and shelter) to these species and increase biodiversity to more natural levels. The project plans collaboration with other federal, state, local, and non-profit agencies, as part of a system wide initiative to establish a continuous riparian corridor along the Sacramento River. The Hamilton City project is a key component of this effort because it will connect four already restored areas to provide a continuous habitat corridor far larger than the project’s restoration footprint. Benefits will be incremental starting immediately after planting and full benefits realized by approximately year ten. The value of connecting multiple restoration areas and establishing a larger corridor has synergistic benefits that are not accounted for in the project analysis. The cost for this restoration, including the land costs, are estimated at approximately $31,000 per acre. For Flood Risk Management ($5.2 million) the record flood flow occurred in 1974 when a privately constructed levee failed. Extensive flood fighting and evacuation also took place in 1983, 1986, 1995, 1997, and 1998. The project consists of constructing a setback levee about 6.8 miles long that will have varying heights and varying levels of performance for flood risk management, removal of an existing private levee, and restoration of 1,480 acres of native floodplain habitat. The flood risk management Average Annual Benefits are estimated at $521,000 at October 2012 price levels. Failure to receive funds in FY2014 means the construction of the project cannot begin as planned.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate and complete removal of existing levee and construct setback levee. This will reconnect the natural river flows to the restoration area which is required for restoration. This includes removal of existing orchards in the restoration area.	$ 7,000,000
Continue acquisition and propagation of plants; installation and establishment monitoring for restoration area to include engineering, design and construction management.	8,000,000
Total	$15,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction And Reimbursements	Annual Operation Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas, which are partially offset by a credit allowed.	$16,400,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.	720,000	
Pay 2 percent of the costs allocated to ecosystem restoration to bring the total non-Federal share of ecosystem restoration costs to 35 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control and ecosystem restoration facilities.	1,180,000	
Total Non-Federal Costs	$18,300,000	

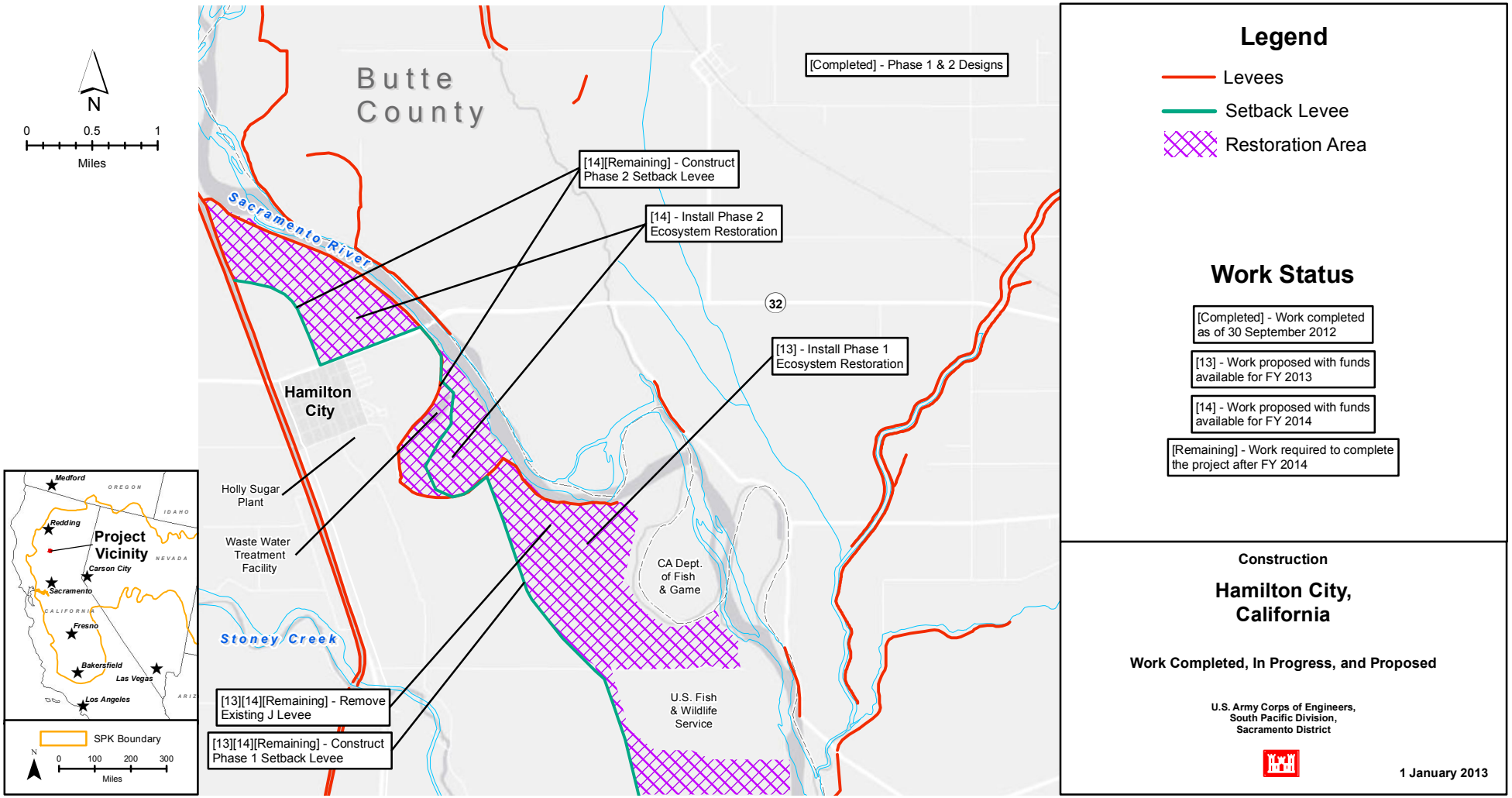
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The PED cost-sharing agreement was executed with the local sponsor, the State of California Reclamation Board, now the Central Valley Flood Protection Board, on December 13, 2005. The Project Partnership Agreement (PPA) is scheduled to be signed in September 2013. The project is authorized for construction by the Water Resources Development Act (WRDA) of 2007 at a total first cost of $52,400,000. The cost sharing for construction of the project will be 65 percent Federal and 35 percent non-Federal in accordance with WRDA 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal first cost estimate of $34,100,000 is the same as the latest estimate presented to Congress (FY 2012).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A combined Environmental Impact Statement/Environmental Impact Report (EIS/EIR), along with the Final Feasibility Report, was completed in July 2004.

OTHER INFORMATION: PED funds were received in 2005. Design was completed in 2010. A Limited Reevauation Report (LRR) is required primarily to address revised cost allocation for the wastewater treatment plant levee as required by the ASA(CW) in 2006. The LRR will also address design refinements and updated economic costs and benefits. There is a cost escalation on the training dyke that has driven the benefit-to-cost ratio to 0.92. The LRR will evaluate either a redesign or elimination of the training dyke to evaluate the Federal interest in the flood risk management feature.


N
0
0.5
1
Miles
Butte
County
Sacramento River
Stoney Creek
Hamilton
City
Holly Sugar
Plant
Waste Water
Treatment
Facility
CA Dept.
of Fish
& Game
U.S. Fish
& Wildlife
Service
32
[Completed] - Phase 1 & 2 Designs
[14][Remaining] - Construct
Phase 2 Setback Levee
[14] - Install Phase 2
Ecosystem Restoration
[13] - Install Phase 1
Ecosystem Restoration
[13][14][Remaining] - Remove
Existing J Levee
[13][14][Remaining] - Construct
Phase 1 Setback Levee
Medford
Redding
Project
Vicinity
Carson City
Sacramento
Fresno
Bakersfield
Las Vegas
Los Angeles
OREGON
IDAHO
NEVADA
CALIFORNIA
SPK Boundary
0
100
200
300
Miles
Legend
Levees
Setback Levee
Restoration Area
Work Status
[Completed] - Work completed
as of 30 September 2012
[13] - Work proposed with funds
available for FY 2013
[14] - Work proposed with funds
available for FY 2014
[Remaining] - Work required to complete
the project after FY 2014
Construction
Hamilton City,
California
Work Completed, In Progress, and Proposed
U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District
1 January 2013

APPROPRIATION TITLE: Construction – Dam Safety

PROJECT: Isabella Dam, California - Dam Safety Seismic Remediation (Dam Safety Assurance) (Continuing)

LOCATION: The Isabella Dam is located approximately 40 miles northeast of Bakersfield, near the confluence of the north and south forks of the Kern River, in Kern County, California. The existing project is comprised of a 185 foot high earthfill main dam, an ungated ogee concrete spillway, and a 100 foot high earthfill Auxiliary Dam located approximately ½ mile east of the Main Dam. The reservoir has a gross storage capacity of 568,075 acre feet.

DESCRIPTION: The Isabella Lake project dams are currently classified as being at a high risk of failure with significant consequences downstream. There are three primary deficiencies (hydrologic, seismic, and seepage/piping) at the project which could lead to significant life loss in the event of a dam failure. Work to be performed includes continuing preconstruction engineering and design (PED) of the Dam Safety Modification (DSM) project and start of construction. The recommended risk management plan consists of the following: 1) A new Emergency Spillway which will be a 900-foot wide Labyrinth Spillway with a 16-foot dam raise to pass the probable maximum flood (PMF); 2) buttress and foundation treatments at the Auxiliary dam to increase seismic stability and remediate seepage concerns; 3) a filter and drain system in the downstream slope of the Main dam to increase stability; 4) modifying the existing spillway to raise the spillway walls, anchor the walls and ogee crest for the additional head during operation, and line the chute with concrete to mitigate for plucking and erosion; and 5) relocation or realignment of the Borel canal to reduce seepage and piping risks. Caltrans Highways 155 and 178 must be relocated to accommodate the 16-foot dam raise. PED efforts will cover the design of the Borel Tunnel realignment highway relocations, Main and Auxiliary Dam embankment modifications, and an emergency spillway. Construction efforts will include all the real estate actions except efforts associated with the US Forest Service facilities and possibly Highways 155 and 178. The relocation related subjects include demolition and relocation of existing Corps facilities; US Forest Service relocation of its offices and maintenance areas; and the relocation of private residences. Several interim risk reduction measures (IRRMs) are in use to reduce the risk until long term risk reduction measures are implemented. An emergency reservoir pool restriction is presently in place to reduce the seepage-piping and seismic risk.

AUTHORIZATION: Flood Control Act of 1944, P.L. 78-534, Chapter 665, Sec. 10

REMAINING BENEFIT - REMAINING COST RATIO: Construction has not initiated.

TOTAL BENEFIT - COST RATIO: 0.63 at 7 percent.

BASIS OF BENEFIT - COST RATIO: The Total Benefit – Cost Ratio represents a comparison to the Baseline Condition and is the annualized risk reduction cost divided by the annualized implementation cost (including Operations & Maintenance costs) per the Final Dam Safety Modification Report December 2012. This does include monetized life loss figures, but does not include the benefits the project already receives.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Total Appropriation Requirement		$ 537,800,000		DSM Report	100	Dec 2012
Future Non-Federal Reimbursement		$ 17,505,390				
Estimate Federal Cost (Ultimate)		$ 520,294,610	8/			
Estimated Non-Federal Cost		$ 17,505,390				
Cash Contributions	0					
Other Costs	0					
Reimbursements	17,505,390					
Total Estimated Project Cost		$537,800,000				
Allocations to 30 September 2010		0				
Allocation for FY 2011		0				
Allocation for FY 2012		0				
Conference Allowance for FY 2013		0	5/			
Allocations through FY 2013		7,444,000	1/ 2/ 3/ 6/			
Estimated Unobligated Carry-In Funds		0	4/			
President's Budget for FY 2014		28,200,000				
Programmed Balance to Complete after FY 2014		502,156,000	7/			
Un-programmed Balance to Complete after FY 2014		$ 0				

1/ $ 0 reprogrammed to (from) the project.
2/ $ 0 rescinded from the project.
3/ $ 0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013. Funds will be provided through the Wedge funds. Study phase Allocations prior to FY2013 are $35,929,300.00. FY 2013 first quarter wedge amount of $700,000 was received as a customer order for study phase and the remaining three quarters $7,444,000 will be funded from the Wedge for PED phase.

6/ PED costs of $7,444,000 are included in this amount.

SUMMARIZED FINANCIAL DATA: (Continued)

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

8/ The current estimate is for Dam Safety Modification PED efforts (Phase 2) and construction costs (Phase 3). Previous total project cost was for (Phase 1), dam safety investigation and studies and site characterization efforts to accomplish the project decision document (DSM Report).

PHYSICAL DATA: FY 2014 appropriations will be used to collect and analyze geophysical conditions at the Isabella project. This data will be used in the development of the Highway Relocation Contract, the Spillway and Buttress Contract, and the preliminary work on the Borel Relocation Contract

JUSTIFICATION: Isabella Dam has been classified as a Dam Safety Action Class Level I Dam (Urgent and Compelling, where the dam is critically near failure and there is an extremely high risk to life and property, primarily in Lake Isabella and Bakersfield, CA. The spillway capacity is inadequate, and there are known seismic and seepage hazards that could cause deformation of the structures. A screening Portfolio Risk Assessment was completed by HQ. An external peer review panel found that urgent and compelling classification by USACE was appropriate. Reservoir restriction will be extended until construction of the modifications is completed. The interim reservoir restriction results in economic loss to the water users. Remediation of the dam safety deficiencies is necessary. The population at risk (PAR) is approximately 350,000 people in the city of Bakersfield and the town of Lake Isabella. In the event of a dam failure there could be loss to Interstate 5, Highways 99 and 58; major railroads lines; and the California state water project (supplies water to the Los Angeles metropolitan area). The average annual benefits are $15,520,000.

Failure to receive funds in FY2014 will delay remediation of this DSAC 1 dam, which poses an extremely high risk to life and property. Additionally, reservoir restriction will be extended which results in economic loss to the water users.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Initiate PED	$7,444,000

FISCAL YEAR 2014: The budget amount plus carry-in amount will be applied as follows:

Complete Phase 2,PED	$10,000,000
Relocation Costs for Private Residences	15,700,000
Relocate Corps Project Office	2,500,000
Total	$28,200,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the

non-Federal sponsor must comply with the requirements listed below

Requirements of Local Cooperation	Payment During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Reimburse 15 percent of the original costs share percentage of 21.7 of modification allocated to irrigation water supply (15% x 21.7%) or 3.255% of total project cost) within a period of 30 years following completion of construction.	$17,505,390	
Total Non-Federal Costs	$17,505,390	

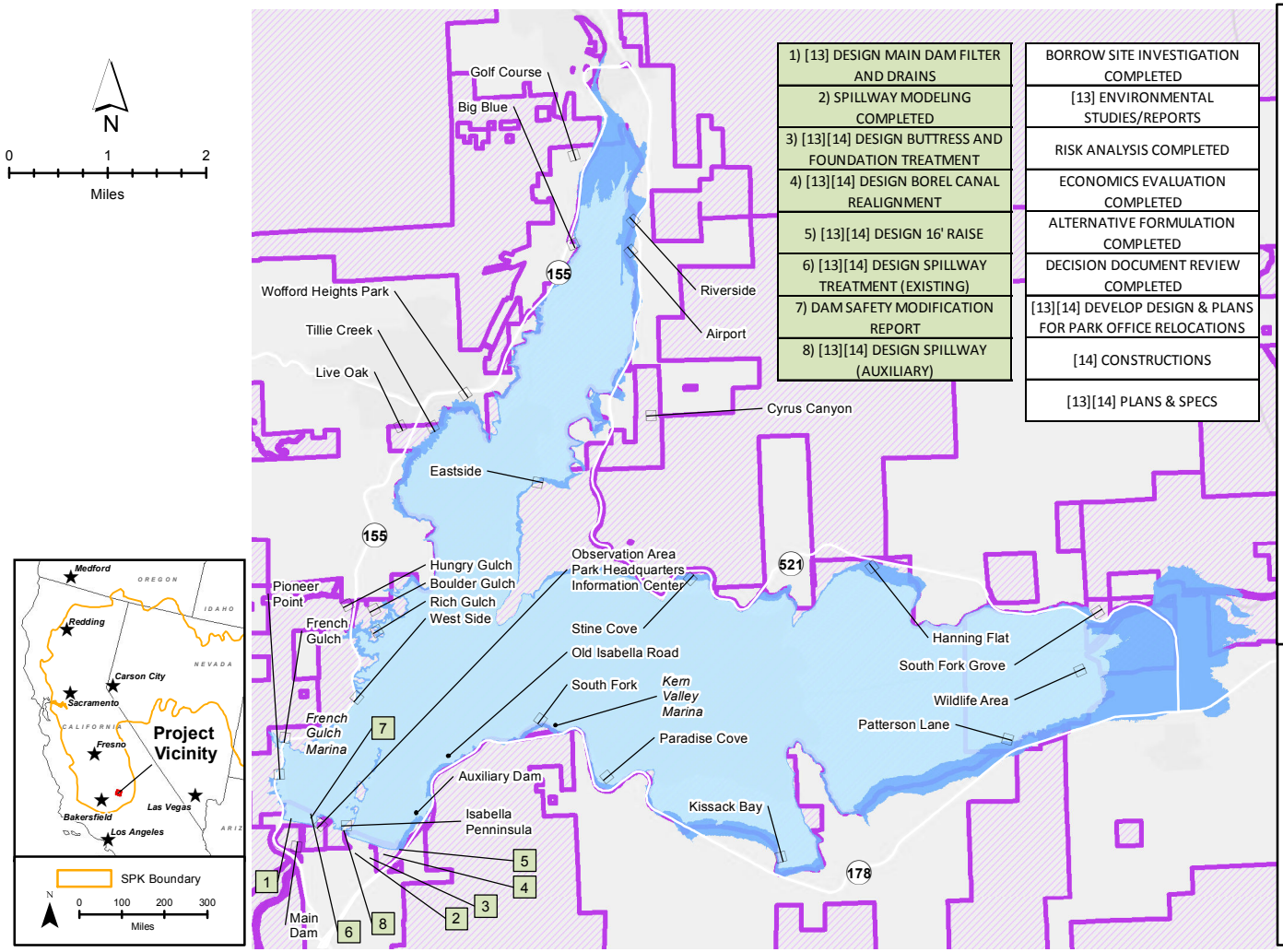
STATUS OF LOCAL COOPERATION: There is an existing contract for local reimbursement of project costs (dated 23 October 1964) between the United States (Department of the Interior) and North Kern Water Storage District, Buena Vista Water Storage District, Tulare Lake Basin Water Storage District, and Hacienda Water District (hereinafter collectively known as the "Districts"). The total obligation payable by the Districts to the United States was $4,573,000 for the total cost of the project allocated to irrigation, which amounted to 21.7% of the construction cost of the dam, at the time was $22,000,000. North Kern Water Storage District was responsible for $3,109,640 and Buena Vista Water Storage District for $1,463,360.

In accordance with ER 1110-2-1156 dated 28 Oct 2011 and given the original agreement, the proposed non-Federal cost share for the Isabella Dam Safety Modification Project (PED and construction) be cost-shared at 15% of the original cost share percentage (15% x 21.7%) at 3.255%. It is anticipated that there will be a repayment contract for the remediation cost between the United States (Department of Interior) and the Districts. Distribution of the 21% may remain the same as the original contract between the following two contractors, North Kern Water Storage District and Buena Vista Water Storage. The tentative date to have this draft repayment plan is prior to construction.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $537,800,000, outlined in the Dam Safety Modification Report December 2012, is the first Construction estimate presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: An Environmental Impact Statement (EIS) was included in the decision document; the EIS and ROD were signed in December 2012 following public review. The final DSM Report was signed in December 2012. Additional National Environmental Policy Act documents will be provided during the design efforts to address real estate actions, and recreation and fisheries.

OTHER INFORMATION: This project was funded under the O&M appropriation prior to FY2007. Isabella Dam was placed in operation and became fully operational in 1953. The Dam Safety Modification Report was signed in December 2012 and Phase 2 of the Dam Safety Program or the PED phase will initiate in FY 2013.



1) [13] DESIGN MAIN DAM FILTER AND DRAINS	BORROW SITE INVESTIGATION COMPLETED
2) SPILLWAY MODELING COMPLETED	[13] ENVIRONMENTAL STUDIES/REPORTS
3) [13][14] DESIGN BUTTRESS AND FOUNDATION TREATMENT	RISK ANALYSIS COMPLETED
4) [13][14] DESIGN BOREL CANAL REALIGNMENT	ECONOMICS EVALUATION COMPLETED
5) [13][14] DESIGN 16' RAISE	ALTERNATIVE FORMULATION COMPLETED
6) [13][14] DESIGN SPILLWAY TREATMENT (EXISTING)	DECISION DOCUMENT REVIEW COMPLETED
7) DAM SAFETY MODIFICATION REPORT	[13][14] DEVELOP DESIGN & PLANS FOR PARK OFFICE RELOCATIONS
8) [13][14] DESIGN SPILLWAY (AUXILIARY)	[14] CONSTRUCTIONS
	[13][14] PLANS & SPECS

Legend

- Current Spillway Design Capacity
- Gross Pool
- Parks and Open Space

Work Status

[Completed] - Work completed as of 30 September 2012

[13] - Work proposed with funds available for FY 2013

[14] - Work proposed with funds requested for FY 2014

[Remaining] - Work required to complete the project after FY 2014

Construction

Isabella Lake DSAP
California

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District

1 January 2013

APPROPRIATION TITLE: Construction - Environmental Restoration

PROJECT: Napa River Salt Marsh Restoration, CA (Continuing)

LOCATION: Project is located along the north side of San Francisco Bay, approximately 45 miles north of San Francisco, California, adjacent to the lower reach of the Napa River in the counties of Napa, Solano, and Sonoma.

DESCRIPTION: The Napa River Salt Marsh Wetlands once encompassed 25,000 acres. Agricultural use and salt production reduced them to approximately 30% of their former extent. In 1994 the Cargill Salt Company ceased salt production and sold over 9,800 acres of lands in the study area to the State of California. The land is now managed by the California Department of Fish and Game (DFG).

The final Chiefs Report dated 22 December 2004, recommended restoration of seven salt production ponds as salt marsh wetlands in the Napa-Sonoma Marshes Wildlife Area. The recommended plan began with salinity reduction via discharges to the Napa River and Slough in Ponds numbered 4, 5, 6, 6A, 7, 7A and 8. Dilution would be accomplished using water control structures and a breach of the Pond 4 levee. A mix of tidal and pond habitats would be created by restoring ponds 4 and 5 to tidal action, and adaptive management of ponds 6 through 8 for future opening by the California Department of Fish and Game (DFG). Design and construction of Ponds 1, 1A, 2, 2A, 3, 4, and 5 have been completed separately by the sponsor, along with 90% designs for Ponds 6, 6A, 7, 7A and 8.

The Project will restore 4,534 acres of high quality pond and tidal marsh habitat. It is anticipated that Ponds 4 and 5 will be restored to tidal action within two to five years, depending on the rate of habitat evolution in Pond 3, already opened by DFG. The recommended plan will rely on natural sedimentation for the majority of the restoration area and natural colonization by marsh vegetation. Pond 4 is expected to become tidal marsh within approximately 40 years. Habitat evolution in Pond 5 will take longer because it is farther removed from the sediment supply. After initial construction is complete, monitoring will be required to identify specific requirements for and timing of adaptive management actions. It is planned, specifically, for five years after construction of the managed ponds (Ponds 1, 1A, 2, 6, 6A, 7A and 8), ten years for ponds opened to tidal action (Ponds 3, 4, 5) and ten years for Pond 7. The estimated cost for adaptive management and monitoring activities to occur after FY 2014 is $3,155,000.

Recreation opportunities would be significant with restoration of the ponds and tidal areas. Recreational features in the recommended plan include facility upgrades to enhance educational activities, including interpretive signage, a comfort station, footpaths, and fishing platforms.

AUTHORIZATION: Water Resources Development Act 2007 (WRDA 2007), Section 1001
REMAINING BENEFIT - REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT - COST RATIO: Ecosystem Restoration - Both Cost Effectiveness and an Incremental Cost Analysis (CE/ICA) were performed to evaluate the efficiency of restoration alternatives, and to identify of the National Ecosystem Restoration Plan (NER). Once habitat goals were identified for each pond, based on cost-effectiveness analysis, recycled water benefits, and other considerations, the respective habitat benefits (based on managed pond or tidal marsh status) were calculated for each pond and entered into the final incremental cost analysis.

Recreation – 10.6 to 1.

INITIAL BENEFIT - COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because environmental benefits were not quantified in monetary terms.The benefits were determined using a modified Habitat Evaluation Procedure (HEP) analysis and are presented in non-monetary terms (Habitat Units, or HUs).

BASIS OF BENEFIT - COST RATIO: Project justification is based on nonmonetary benefits of wetland habitat restoration in the Final Napa Salt Marsh Restoration Project Feasibility Study report, dated August 2004.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF FED COST	STATUS (1 Jan 2013)	PCT CMPL	COMPLETION SCHEDULE
<u>Ecosystem Restoration</u>				Authorized Environmental	10	TBD
Estimated Federal Cost		$ 26,175,000				
Estimated Non-Federal Cost		$ 14,094,000				
Cash Contribution	$ 1,299,000					
Other Costs	$ 12,795,000					
Total Ecosystem Restoration		$ 40,269,000				
<u>Recreation</u>						
Estimated Federal Cost		$ 575,000				
Estimated Non-Federal Cost		$ 575,000				
Cash Contribution	$ 531,000					
Other Costs	$ 44,000					
Total Recreation		$ 1,150,000				
Project Summary						
Estimated Federal Cost		$ 26,750,000				
Estimated Non-Federal Cost		$ 14,669,000				
Cash Contribution	$ 1,830,000					
Other Costs	$ 12,839,000					
Total Estimated Project Cost		$ 41,419,000				

PHYSICAL DATA

Restoration of seven salt marsh wetlands Total Estimated breach existing berms; construct water control features

.

SUMMARIZED FINANCIAL DATA (Continued)			ACCUM PCT OF FED COST	STATUS OF (1 Jan 2013)
Allocations to 30 September 2010	$ 285,000			
Allocation for FY 2011	10,610,000			
Allocation for FY 2012	7,000,000			
Conference Allowance for FY 2013	2,500,000	5/		
Allocations through FY 2013	20,395,000	1/ 2/ 3/ 6/	76	
Estimated Unobligated Carry-In Funds	700,000	4/		
President's Budget for FY 2014	3,200,000		88	
Programmed Balance to Complete after FY 2014	$ 3,155,000	7/		
Un-programmed Balance to Complete after FY 2014	0			

1/ $0 reprogrammed to/from the project.
2/ $35,754 rescinded from the project.
3/ $6,604,522 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $700,000. This amount will be used to perform work on the project as follows: perform necessary engineering during construction and supervision and administration of the construction contract.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

6/ PED costs of $0 are included in this amount.

7/ For programmed work only.

JUSTIFICATION: The San Francisco Estuary (San Francisco, San Pablo, and Suisun Bays) is a nationally significant estuary and the largest estuary on the Pacific Coast of the contiguous 48 states. This restoration project represents a unique opportunity for large-scale ecosystem restoration, because the Estuary once had the largest area of contiguous tidal marsh habitat on the Pacific Coast, prior to reclamation. It is a critical stop for migratory waterfowl and has one of the largest concentration of shorebirds on the Pacific Flyway wintering there than in any other location in California; and provides habitat for a large number of Threatened and Endangered Species, including the California clapper rail, California black rail, San Pablo song sparrow, Western burrowing owl, salt marsh harvest mouse, Chinook salmon, steelhead trout, Delta smelt, Long-fin smelt, and splittail. According to the U.S. Environmental Protection Agency (EPA), more ducks winter in the Estuary than in the much larger Chesapeake Bay.

Due to human impacts, approximately 90% of historic wetlands in San Francisco Bay area have been lost since the early 1900's. The degradation of fish and wildlife resources associated with these losses has resulted in federal listing of several species as being threatened or endangered (delta smelt, spittail, steelhead trout, and chinook salmon. To prevent permanent loss of listed species in the San Francisco Bay, it is critical to restore the wetlands now. In addition, salinity in the ponds fringing the Bay is increasing, resulting in significant decline of ecological values. Several ponds are considered a potential threat to the ecology of the North Bay region because of the presence of larger quantities and high concentration of residual salts. The project involves restoration and enhancement of 4,534 acres of tidal marsh, sloughs, and open-water ponds to include substantial water quality and habitat improvements in former commercial salt ponds. Among federally listed species benefiting from the project are steelhead trout, Chinook salmon, delta smelt, green sturgeon, salt marsh harvest mouse, and clapper rail, among other species. Benefits expected within two years after construction for Ponds 6, 6A and 7 is 1,437 acres. Benefits to be realized in eight to ten years after Pond 7 improvements include 302 acres. Pond 7A (291 acres) benefits will not be realized until eight years from implementation and no benefits are included from Pond 8.

If FY 2014 funding is not provided, the construction management of FY 2013 contracts (Ponds 6, 6a, 7 and 7a) cannot continue thereby creating a potential termination for convenience of the government to be invoked. FY 2013 contract termination would not only result in contractor payments from Government funds, but also increase any future re-contract actions post FY 2014.

Average annual benefits for recreation of about $1,100,000 result in a benefit-to-cost ratio of 10.6 for the recreational features of the project.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being used as follows:

Award construction contracts for Ponds 6, 6a, 7 and 7a.	$2,500,000
Total	$2,500,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Award construction contract for Pond 8	$2,900,000
Monitoring of Ponds 6, 6a, 7 and 7a	300,000
Carry-in for Engineering during Construction	700,000
Total	$3,900,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 and the Water Resources Development Act of 2007, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repairs, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.	$ 7,426,000	N/A
Pay 46.2 percent of the separable costs allocated to recreation to bring the total non-Federal share of recreation costs to 50 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation features.	$ 531,000	
Creditable in-kind contributions (Section 221 of the Flood Control Act of 1970, as amended)	$ 5,413,000	N/A
Pay 3.2 percent of the costs allocated to ecosystem restoration to bring the total non-Federal share of ecosystem restoration costs to 35 percent as reduced for credit allowed for work in kind and bear all costs of operation, maintenance, repair, rehabilitation and replacement of ecosystem restoration features.	$ 1,299,000	
Total Non-Federal Costs	$14,669,000	N/A

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The California Department of Fish and Game (DFG), the local sponsor for the construction phase, has agreed to comply with all project requirements. The California State Coastal Conservancy (SCC) was the non-federal sponsor during the development of the Feasibility Report. SCC requested a PED cost-share agreement deviation that would limit the total cost of PED. The Assistant Secretary of the Army for Civil Works (ASA (CW)) denied the request and the PED Agreement was never signed. The Project Partnership Agreement (PPA) would apply to design and was executed on 15 June 2012.

The current non-Federal cost estimate is $14,669,000. In a letter dated 11 May 2010, the non-Federal sponsor has indicated it is financially capable and willing to contribute the non-Federal share. Our analysis of the non-federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $26,750,000 is the same as the last estimate presented to Congress (FY 2013.

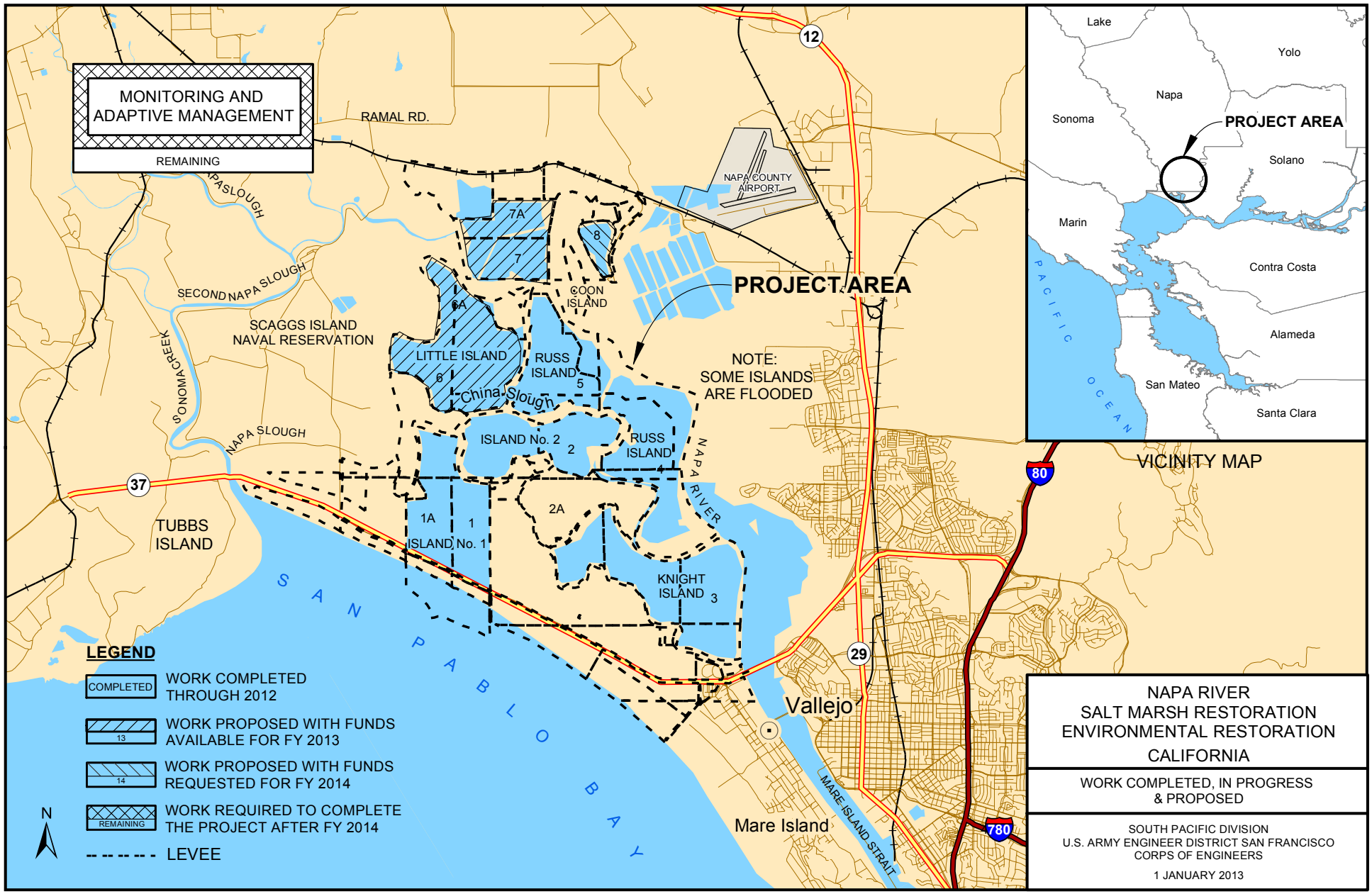
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Environmental Impact Statement/Environmental Impact Report completed in 2004 and the Record of Decision signed 17 November 2005.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design (PED) were never appropriated and no PED agreement was executed. Funds to initiate construction were appropriated in 2010. The final Feasibility Report, completed in June 2004, recommended seven of the twelve salt ponds be restored to salt marsh wetlands, Ponds 4, 5, 6, 6A, 7, 7A and 8. The Chief's report was signed in December 2004. OMB clearance was provided in November 2005. Design and construction of Ponds 1, 1A, 2, 2A, 3, 4, and 5 is complete. The non-Federal sponsor constructed Ponds 4 and 5 and completed 90% design drawings, specification, and estimate for Ponds 6-8. Water Resource Development Act (WRDA) 2007 authorized crediting the non-Federal sponsor for work completed on the approved project before a PPA is signed.

The total project authorization in WRDA 2007 is for $134,500,000 with an estimated Federal cost of $87,500,000 and an estimate non-Federal cost of $47,000,000. Although included in the authorization, non-policy compliant components to restore or enhance Salt Ponds 1, 1A, 2 and 3, and construction of a recycled water pipeline extending from the pumping station managed by Sonoma Valley County Sanitation District to the project are limited to preliminary survey and design costs in this justification document. The Corps will construct these features when specifically appropriated construction funding is provided by Congress.

In accordance with In-Kind contribution provisions of Section 221 of Flood Control Act of 1970, as amended by Section 2003 of the Water Resources Development Act of 2007 and as documented by the 28 July 2010 ASA(CW) approval of the Integral Determination Report: The San Francisco District has provided supporting documentation for the in-kind work performed by the non-Federal sponsor. The cost for the performed in-kind design and construction work totals $5,720,000 which is lower than the estimated cost for the work items as contained in the Feasibility Report and is within the estimated $12,883,000 total non-Federal additional cash requirement for the project. Of the total in-kind work, SCC is responsible for $1,870,000 of the credit and DFG is responsible for $3,850,000. The final credit afforded for the in-kind work is subject to audit by the government. The actual value of the in-kind contributions will be determined in accordance with the limitations and conditions of the PPA.

The Project Partnership Agreement provides updated total project costs per the Project Cost Engineering Memorandum, dated 9 November 2011.



U. S. ARMY CORPS OF ENGINEERS

1 May 2013

SPD-74

APPROPRIATION TITLE: Construction - Channels and Harbors (Navigation)

PROJECT: Oakland Harbor (-50 ft), California (Continuing)

LOCATION: Oakland Harbor is located in the city of Oakland, California, on the eastern shore of central San Francisco Bay immediately south of the San Francisco-Oakland Bay Bridge, near the 77th terminal.

DESCRIPTION: Previously authorized deepening of the 4 mile Inner Harbor and 3.4 mile Outer Harbor to 42 feet deep was completed in July 1998.The project was deepened to 50 feet deep in 2010 and included the deepening of the 4 mile Inner Harbor and 3.4 mile Outer Harbor channels, including the respective turning basins, to 50 feet; widening of channels at various locations; and widening of the Inner and Outer Harbor turning basins. Approximately 12.8 million cubic yards of excavated dredged material was disposed.

The Middle Harbor Enhancement Area (MHEA) will use about 7 million cubic yards to create 190 acres of shallow water and sub-tidal habitat in an area no longer needed for navigation purposes; approximately 2.6 million cubic yards would be placed at the former Hamilton Army Airfield in Novato, California, as part of a separately authorized tidal wetlands restoration project; approximately 2.9 million cubic yards would be disposed at the existing Montezuma Wetlands Restoration Project (MWRP) in the northeast portion of Suisun Bay, and approximately 0.3 million cubic yards would be transported to the Vision 2000 upland site in the Inner Harbor. Remaining work includes grading/shaping and planting of eelgrass at the MHEA. Once completed, the site will be monitored and adaptively managed for an additional five years.

AUTHORIZATION: Water Resources Development Act of 1999, § 101(a)(7), Pub. L. No. 106-53,113 Stat 269, 275.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable since all project economic benefits are being realized. The project navigation features are completed and only mitigation components remain.

TOTAL BENEFIT - COST RATIO: 4.0 to 1.0 @ 7 percent.

INITIAL BENEFIT - COST RATIO: 8.1 to 1.0 @ 7 percent.

BASIS OF BENEFIT - COST RATIO: The initial BCR is from the Chief of Engineer’s report approved in April 1999. A 2005 economic reevaluation updated the benefit projections based on updated fleet forecast and construction schedule. The update found that the average annual benefits had remained essentially the same as forecasted in the Chief's report. Using these benefits, the increased cost of the project and the longer duration of project construction has decreased the total BCR to 4.0. Equivalent annual benefits at 7% are estimated to be $160,000,000, while the annualized total project cost ($540,000,000 when including interest during construction) is calculated to be $39,000,000. As part of the Limited Reevaluation Report (LRR), the district is completing a level 1 economic reaffirmation report with methodology approved through the Agency Technical Review process in the first quarter of FY 2013.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (COE)		$248,206,000		Entire Project	95	TBD
Estimated Federal Cost (USCG)		300,000				
Estimated Total Federal Cost		248,506,000				
Estimated Non-Federal Cost		$165,252,000				
Cash Contribution	$ 79,206,000					
Other Costs	86,046,000					
Total Estimated Project Cost		$413,758,000	9/			
Allocations to 30 September 2010		238,318,000				
Allocation for FY 2011		3,781,000				
Allocation for FY 2012		1,211,000				
Conference Allowance for FY 2013		500,000	5/			
Allocations through FY 2013		243,810,000	1/ 2/ 3/ 6/ 98			
Estimated Unobligated Carry-In Funds		0	4/			
President's Budget for FY 2014		100,000	98			
Programmed Balance to Complete after FY 2014		4,296,000	7/			
Un-programmed Balance to Complete after FY 2014		9,000,000	8/			

PHYSICAL DATA

Channels: Deepen the 4 mile Inner Harbor and 3.4 mile Outer Harbor channels to 50 feet; Widen various locations.
Turning Basins: Widen Inner and Outer Harbor Turning Basins and deepen to 50 feet.
Habitat: Create 190 acres of shallow water and sub-tidal habitat.

1/ $540,000 reprogrammed from the project.
2/ $8,975 rescinded from the project.
3/ $896 PED funds transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A.

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

6/ PED costs of $3,185,000 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

SUMMARIZED FINANCIAL DATA: (Continued)

8/ This unprogrammed amount reflects the preliminary costs to complete the MHEA. This unprogrammed cost is not included in the Total Estimated Project Cost shown above. The current total project cost to complete the MHEA is over the 902 cost limit of $412,384,000 and a Limited Evaluation Report (LRR) is being prepared to address this 902 bust. As of the date this justification sheet was prepared, total allocations to date are $408,561,308.68.

9/ Total Estimated Project Cost does not include feasibility costs of $13,926,000 that are creditable pursuant to the Water Resources Development Act of 1986, Section 203, and the Project Cooperation Agreement (PCA). These costs are not included in the 902 limit calculation discussed under “Other Information.”

JUSTIFICATION: The Port of Oakland services about 85 percent of all general cargo moving through the Golden Gate, 95 percent of which is containerized. Major Imports include any cargo which can be shipped via container, including electronics, mercantile, raw cotton, animal feed, meat, coffee, tea and spices, iron and steel, wood, lumber, sundries, etc. Basically all cargo, excluding bulk elements such as grain, oil, and other bulk materials, can be shipped in container boxes and will be shipped from Asia to the Midwest and beyond, through the Port of Oakland. Major exports include agricultural produce and beverages from California, meat, electronics, automobile parts, pulp and waste paper, specialized industrial machinery, and synthetic resins and plastic chemicals, and are shipped to Asia through the Port of Oakland.

The existing Federal navigation channel serving Oakland Harbor is now adequate for efficient shipping operations and vessel safety as a result of increased vessel traffic and deployment of the next generation of containerships. Annual tonnage handled by the Port is 30 million tons per year. Average annual benefits, all commercial navigation, are estimated at $165,000,000. Savings per ton of cargo (Average Annual Benefits/Average Annual tonnage) is $5.5/ton.

The Port terminals are considered to be state-of-the-art. The plan of improvement will provide for further development of the harbors to accommodate the new generation of containerships, improve safety of vessel traffic and provide maximum efficiency of Port operations. The majority of ships presently using the Port have design drafts greater than 35 feet. Sixth generation vessels are now coming on line with drafts of 46 feet or greater (up to 48 feet at the present time). The deep draft fifth and sixth generation container ships experience tidal delays, with the result being that many of the shipping lines either bring those ships into Oakland only partially loaded or choose to bypass Oakland altogether. Limited deepening of the Inner Harbor portion of the project to -38 feet was completed in December 1992 and deepening of the Inner and Outer Harbors to -42 feet was completed in July 1998. Vessels may now depart the Port with some additional cargo, but must still arrive light-loaded. The remainder of the project is needed to allow safe and efficient utilization of the Port. Depths of 50 feet are required for users to efficiently call at the Port of Oakland presently and in the future. Recent economic events have resulted in a downturn in worldwide shipping which has caused a reevaluation of shipping routes and new port developments for the near future. Current information indicates that the current 5200 and 6000 TEU ships will be operating as the standard vessel for at least 6 to 7 more years. Average annual benefits, all navigation, are $160,000,000.

If FY 2014 funding is not provided, project management and FY 2013 and prior contracts will not be done. Overall impacts should FY14 funding not be provided are considered marginally adverse.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being used as follows:

Continue construction management for the initial grading contract at the Middle Harbor Enhancement Area	$500,000
Total	$500,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Construction oversight of FY 2013 and prior year contracts & project management	$100,000
Total	$100,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights of way, and dredged material disposal areas.	$ 9,120,000	N/A
Modify or relocate utilities, roads, bridges (except railroad bridges) and other facilities, where necessary for the construction of the project.	10,000,000	N/A
In-Kind Credit for 50% of Section 203 expenditures for Project Coordination Team (PCT) to be reimbursed during construction as detailed in Water Resources Development Act of 1986.	6,329,000	N/A

NON-FEDERAL COST: (Continued)

Pay 25 percent of the costs allocated to general navigation features for deepening to 45 feet, and 50 percent of the costs allocated to general navigation features for deepening greater than 45 feet during construction, and pay 50 percent of the costs of incremental maintenance below 45 feet mean low water.	46,618,000	$694,000
Pay 25 percent of the costs for beneficial use of dredged material in accordance with Section 204 of the Water Resources Development Act of 1992.	32,588,000	N/A
Pay 100% of the costs for local service facilities.	53,897,000	N/A
Pay 100% of the costs for berthing facilities.	6,700,000	N/A
Total Non-Federal Costs	$165,252,000	$694,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The non-Federal sponsor, the Port of Oakland, contributed full funding for the feasibility study of the 50 foot deepening of the Inner and Outer Harbor, under the authority of Section 203 of the Water Resources Development Act of 1986. The design agreement was executed on 24 March 1999. The Project Cooperation Agreement was executed on 24 July 2001.

The current non-Federal cost estimate of $165,252,000 which includes a cash contribution of $79,206,000 is approximately $10,296,000 more than the amount of $154,956,000 reflected in Amendment 1 of the Project Cooperation Agreement. The non-Federal sponsor has indicated it is financially capable and willing to contribute to the non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $248,206,000 is the same as the last estimate presented to Congress (FY 2013). This represents the fully funded cost of the estimate provided in the Chief’s report and is consistent with the Federal cost in the 1999 WRDA.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with EPA in May 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design (PED) were appropriated in Fiscal Year 1999. Funds to initiate construction were appropriated in Fiscal Year 2001. The initial construction contract was awarded on 27 September 2001. The Oakland Harbor PCA amendment package for acceptance of additional local funds was executed February 2005. The local sponsor has contributed additional funds to the project in FY 2006 to maintain the schedule.

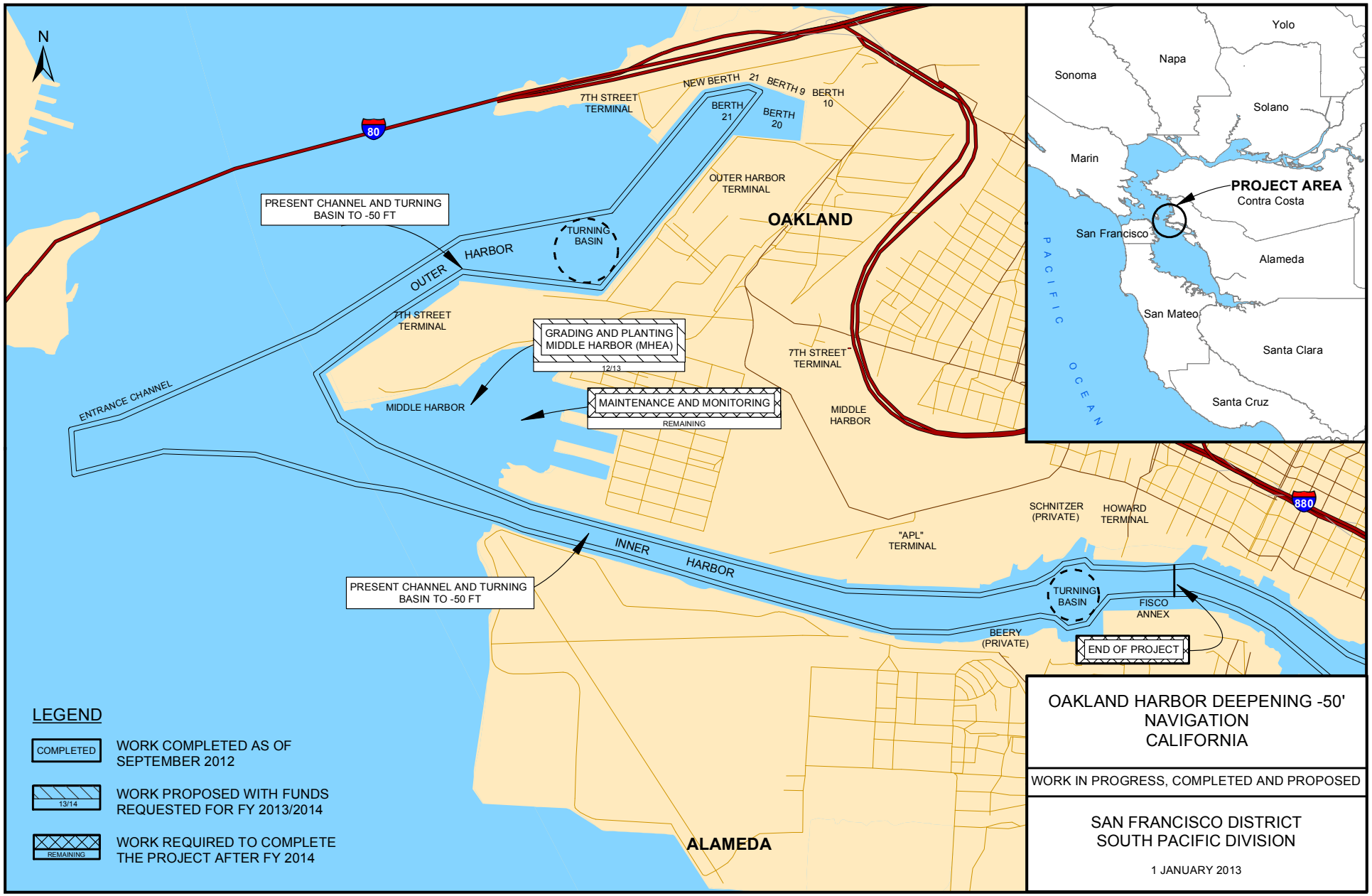
The Chief's Report was signed on 21 April 1999, and a. The PED phase was initiated in April 1999. The first phase of the Inner Harbor Turning Basin construction was completed in September 2003. The dredging of both the Inner and Outer Harbors to a depth of 46 feet was completed in October 2005. The Outer Harbor
OTHER INFORMATION: (Continued)

deepening to 50 feet was completed in November 2008. The Inner Harbor deepening to 50 feet was completed in January 2010. Dredged material was placed at the Hamilton Wetlands Restoration Project site, the Montezuma Wetlands Restoration Project Site, the Middle Harbor Enhancement Area (MHEA) and the San Francisco Deep Ocean Disposal Site (SF-DODS). Remaining work includes grading/shaping and planting of eelgrass at the MHEA. Once completed, the site will be monitored and adaptively managed for an additional five years.

The FY 2013 amount of $500,000 and FY 2014 amount of $100,000 were originally planned to be used for adaptive management and environmental monitoring contracts. Because the cost estimate for the grading and eelgrass planting scheduled for completion in FY 2011 has increased to approximately $14,300,000, FY 2011 through the FY 2014 budgeted amounts are insufficient to accomplish this work.

A 902 limit calculation was performed in July 2011. The resulting 902 limit was calculated to be $412,384,000. The current project cost including inflation through construction is $413,458,000. A 902 Project Increase Fact Sheet was prepared in August 2011. The District received approval to award the current increment of work, initial grading at MHEA for approximately $4,000,000. Future increments of work are contingent upon preparation of a Post Authorization Review Fact Sheet (PAR) and Limited Reevaluation Report (LRR), scheduled to be completed in January 2013.

Feasibility costs of $13,926,000 are not included in the current project cost because they were not included in the original authorized amount of $252,290,000 found in the Chief's Report of 21 April 1999 and the authorizing legislation. These costs are creditable to the Non-Federal Sponsor in accordance with the Water Resources Development Act of 1986, Section 203, and the PCA. These Feasibility Study costs shall be considered in the LRR.



U.S. ARMY CORPS OF ENGINEERS

APPROPRIATION TITLE: Construction – Local Protection (Flood Risk Management)

PROJECT: Sacramento River Bank Protection Project, California (Continuing)

LOCATION: The project is located in north-central California, along the Sacramento River and its principal tributaries approximately from Sacramento River, River Miles (RM) M 0.0 at Collinsville to Chico Landing at RM 194 including Deer Creek and Elder Creek. It is within the limits of the existing Sacramento River Flood Control Project levees and includes Butte Basin, Cache Slough, and a portion of the Sacramento-San Joaquin Delta slough. The project meanders through eight counties including Tehama, Glenn, Butte, Colusa, Sutter, Yolo, Solano, and Sacramento.

DESCRIPTION: The project provides a long-range program of bank protection to preserve the integrity of the Sacramento River Flood Control Project from erosion. It prevents undermining of levee sections and includes fish and wildlife mitigation features. Some recreational facilities have been provided along the river. The Sacramento River Flood Control Project consists of 1125 miles of levees plus overflow weirs, pumping plants, and bypass channels along the Sacramento River approximately from RM 0 near Collinsville to RM 194 near Chico, including several sloughs and the lower reaches of major tributaries. The Sacramento River levee system was initiated as a purely local project, however it was quickly discovered that a system-wide approach was needed. For most of the system the levees were constructed close to the riverbanks without a protective berm to help move the sediment from the hydraulic mining through the system. The levee system, which was adopted as the Sacramento River Flood Control Project in 1917, has been modified and expanded several times since that date but no major change in the basic levee alignment has been made since the original conception of the project.

Of forty-five system elements, to date, improvements in 7 basins have been found to be feasible. The 7 basins are known as Butte Basin, Natomas, Sacramento, Southport, Sutter Island, West Sacramento, and Yolo. Butte Basin is located in the northern part of the Central Valley. The basin is bordered on the west side by the Sacramento River, from RM 142 to 200; on the north side by Mud and Chico Creek; on the east side by the Butte Sink and Sutter Buttes; and on the south side by the Butte Slough levee. The basin is primarily agriculture (rice, orchards, and field crops) with a few small towns and the City of Chico (population 86,000). The Natomas Basin is located in the middle of the northern Central Valley, just north of downtown Sacramento. The basin is bordered on the west side by the Sacramento River, from RM 61 to 81; on the north side by the Natomas Cross Canal; on the east side by the Natomas East Main Drainage Canal and the Pleasant Grove Canal; and on the south by the American River, RM 0 to 2. The basin is a mix of urban and agriculture; it contains a portion of the population of Sacramento (including the Sacramento International Airport). The Sacramento Basin is located in the middle of the northern Central Valley. The basin is bordered on the west side by the Sacramento River, from RM 46 to 60; on the north side by the American River, RM 0 to 11; on the east side by high ground; and on the south side by the Morrison Creek levees. The basin is primarily urban with the city of Sacramento (population 470,000) and the rural urban areas of Sacramento County (total urban area population of 1.4 million). The Southport Basin is located in the middle of the northern Central Valley. The basin is bordered on the north and west side by the Sacramento Deep Water Ship Channel; on the east by the Sacramento River, RM 51 to 57; and on the south side by the South Cross levee. The basin is a mix of urban and agriculture; the urban area consists of a large portion of the City of West Sacramento (population 48,700). The Sutter Island Basin is located in the middle of the Central Valley at the north end of the Delta. The basin is an island bordered entirely by levees, it is bordered on the north and west by Sutter Slough, RM 22 to 28; on the east by the Sacramento River, RM 32 to 34; and on the south by Steamboat Slough, RM 22 to 26. The basin is entirely agricultural, with the majority of the land occupied by Vineyards and Orchards (Cherry and Pear Trees). The West Sacramento Basin is located in the middle of the northern Central Valley. The basin is bordered on the north and east side by the Sacramento River, RM 57 to 63; on the north by the Sacramento Bypass; on the south by the Sacramento Deep Water Ship Channel; and on the east by the Yolo Bypass. The basin is primarily urban with a large portion of the City of West Sacramento (population 48,700) occupying almost the entire basin.

The Yolo Basin is located in the middle of the northern Central Valley. The basin is bordered north and west side by high ground; on the north and east side by the Knights Landing Ridge Cut; on the southwest side by the Yolo Bypass; and on the south side by Cache Creek. The basin is primarily agriculture (Field crops, grain, nursery, and berry crops) and includes the small town of Yolo (population 450).

AUTHORIZATION: Flood Control Act of 1960, Pub. L. 86-645, § 203, 74 Stat. 488, 498 (1960); River Basin Monetary Authorization Act, Pub. L. 93-252, §202, 88 Stat. 49 (1974); Further Continuing Appropriations Act, Pub. L. 97-377, §140, 96 Stat. 1916 (1983); Water Resources Development Act (WRDA) of 1986, Sec. 601 (a); Water Resources Development Act of 2007, Pub. L. 110-114, § 3031, 121 Stat. 1041, 1113 (2007)

REMAINING BENEFIT-REMAINING COST RATIO: 44.6 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 44.6 to 1 at 7 percent (7 Basins)

INITIAL BENEFIT-COST RATIO: N/A (see OTHER INFORMATION)

BASIS OF BENEFIT-COST RATIO: Benefits are from the 2011 Economic Update and addendum, dated 31 October 2011 at October 2010 price levels. Only 21 out of the 45 basins were looked at; only seven of the 21 impact areas are economically justified at an interest rate of 7% (Butte, Sutter Island, Natomas, West Sacramento, Southport, Yolo and Sacramento). Justification for the additional impact areas will be updated in future economic analyses.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Phase I (1963-1978)				Bank Protection	100	1975
				Recreation	100	1975
Estimated Federal Cost		$ 35,607,000				
Estimated Non-Federal Cost		$ 12,022,000				
Cash Contribution	$8,221,000					
Other Costs	3,801,000					
Total Phase 1		$ 47,629,000				
Phase I Mitigation				Bank Protection	100	2001
				First Ph, 430,000 linear feet	100	1975
Estimated Federal Cost		$ 1,314,000		Pine Creek Unit	100	2001
Estimated Non-Federal Cost		$ 806,000		Shaw Unit	100	1999
Cash Contribution	$ 106,000			River Unit	100	1994

Division: South Pacific District: Sacramento Sacramento River Bank Protection, CA

SUMMARIZED FINANCIAL DATA (Continued)			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Other Costs	700,000			Sam Slough	100	1999
				Lohman	100	1997
Total Phase I Mitigation		$ 2,120,000		Princeton Ferry	100	1996
Phase II (LCA Executed Aug 88 and Dec 88)						
Estimated Federal Cost		$ 65,806,000		Bank Protection	90	TBD
				Sep. Element 38B	100	1987
Estimated Non-Federal Cost		$ 21,935,000		Sep Element 40	100	2002
				Sep Element 42	100	2006
Cash Contribution	$ 20,919,000			GRR for 80K LF	60	2013
Other Costs	1,016,000					
Total Phase II		$ 87,741,000				
Phase II Continuing				Bank Protection	91	TBD
				Entire Project	91	unsched.
Estimated Federal Cost		$ 181,243,000				
Estimated Non-Federal Cost		$ 84,787,000				
Cash Contribution	$ 65,919,000					
Other Costs	$ 18,868,000					
Total Phase II		$ 266,030,000				
Project Summary						
Estimated Federal Cost		$283,970,000				
Estimated Non-Federal Cost		$119,550,000				
Cash Contribution	$95,165,000					
Other Costs	24,385,000					
Total Estimated Project Cost		$403,520,000				

SUMMARIZED FINANCIAL DATA: (Continued)

Allocations to 30 September 2010	$227,045,000		
Allocation for FY 2011	8,878,522		
Allocation for FY 2012	9,800,000		
Conference Allowance for FY 2013	3,000,000	5/	
Allocations through FY 2013	248,723,522	1/ 2/ 3/ 6/	88
Estimated Unobligated Carry-In Funds	2,500,000	4/	
President's Budget Amount for FY 2014	3,000,000		89
Programmed Balance to Complete after FY 2014	32,246,478	7/	
Un-programmed Balance to Complete after FY 2014	0		

1/ $28,619,500 reprogrammed to (from) the project.
2/ $131,727 rescinded from the project.
3 /$0 transferred to the Flood Control and Coastal Emergencies account.

4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $2,500,000. This amount will be used to perform work on the project as follows: Project Delivery Team (PDT) support, design, contract awards, Military Interdepartmental Purchase Requests (MIPRS), construction and documentation of repair sites for environmental commitments required by National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA).

5/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

6/ PED costs of $0 are included in this amount.

7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Bank Protection consists of 915,000 lineal feet, First Phase is 430,000 lineal feet and Second Phase is 485,000 lineal feet.

JUSTIFICATION: The Sacramento River Flood Control Project consists of 1125 miles of levees plus overflow weirs, pumping plants, and bypass channels along the Sacramento River approximately from RM 0 near Collinsville to RM 194 near Chico, including several sloughs and the lower reaches of major tributaries. The Sacramento River levee system was initiated as a purely local project, however it was quickly discovered that a system-wide approach was needed. For most of the system the levees were constructed close to the riverbanks without a protective berm to help move the sediment from the hydraulic mining through the system. The levee system, which was adopted as the Sacramento River Flood Control Project in 1917, has been modified and expanded several times since that date but no major change in the basic levee alignment has been made since the original conception of the project. Bank protection is necessary to preserve the Sacramento River Flood Control Project and ensure that it will continue to furnish the desired levels of flood risk reduction. Since the remains of hydraulic mining have moved through, the system is now sediment starved and the levees are continuously threatened by erosion. Unless corrective measures are taken, levee breaches may occur with resultant catastrophic damage and possible loss of many lives. Flood events throughout recent history have greatly emphasized these problems. Several levees located along the Sacramento River were subjected to an extensive amount of erosion due to the extremely high river flows. For

instance in 1986, there was a catastrophic failure of the Yuba River levee, flooding the towns of Linda and Olivehurst resulting in two deaths and 4,000 homes and businesses damaged or destroyed. The cost was more than $95,000,000 in damages. High flows in January and March 1995 caused flooding and erosion in the Butte Basin area along the Sacramento River, River Mile (RM) 188 at Glenn County Road 29. If levee repairs had not been made, additional flooding would have caused extensive loss of agricultural land and endangered residents in nearby communities of Butte City, Princeton and Colusa. In addition, during moderately high flows in February 1996, a 500 foot portion of berm on the American River failed, threatening the levee protecting the city of Sacramento. A contract was awarded in August 1996 to repair this section and provide bank protection for a total of 1,200 lineal feet. In 1997 another catastrophic failure occurred on the Feather River and resulted in three deaths and 800 homes and businesses damaged or destroyed. The sustained high water in January/February 2006 caused great concern and instigated an emergency declaration from the Governor of California relative to levee repair. The area protected by the levees comprises over one million acres in which about 50 communities are located; value of improvements (October 2003 prices) to be protected is about $38 billion and about 2.3 million people live within the flood plain. The levee system enables the use of the flood plain for the benefit of the state and nation. The extremely fertile flood plain lands produce about 6.6 percent of the total agricultural production of the state. The Sacramento River Bank Protection Project (SRBPP) provides a long-range program of bank protection to protect the levees where serious erosion is occurring and to prevent erosion from undermining additional levee sections in the future. Approximately 83,000 lineal feet of bank protection, including 80,000 authorized by WRDA 2007, remains to be placed on the second phase of this project. The local sponsor supports the addition of a third phase, which will require Congressional authorization. A General Reevaluation Report (GRR) will be conducted to address remaining and potential future implementation of the bank protection project once funds are received. The Life Safety Hazard Index is 229. The Average Annual Benefits are all related to flood risk management and are $90,042,000. Failure to receive funding in FY2014 will result in a shutdown of the project and jeopardize our ability to meet compliance under the Biological Opinion for fish monitoring and other critical work. Additionally, no construction or design activities will occur, leaving critical levees at risk.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows:

Support ongoing construction, design, H&H modeling and Biological Opinion (BO) compliance for Phase 2; award construction contracts	$3,000,000
Continue work on the Post Authorization Change Report (PACR)	850,000
Total	$3,850,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Phase II authorization; PDT support, design, contract awards, MIPRS, construction and documentation of repair sites for all environmental commitments required by NEPA/CEQA, and satisfy requirements for BOs issued by United States Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries to mitigate for adverse effects to listed species.	$3,000,000
Total	$3,000,000

Payments During Construction and Reimbursements	Maintenance, Repair, Rehabilitation, and Replacement Costs

Requirements of Local Cooperation

Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$ 18,346,000
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	6,039,000
Pay 25 percent of the total cost of Phase I (1963-1978) to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation and maintenance repair, rehabilitation and replacement of flood control facilities.	8,221,000

NON-FEDERAL COSTS: (Continued)

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay 4 percent of the total cost of Phase I Mitigation to bring the total non-Federal share of costs of Phase I Mitigation to 37 percent for work performed, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of this functional portion of the project.	106,000	
Pay 25 percent of the total cost of Phase II (Local Cooperation Agreement (LCA) Executed Aug 88 and Dec 88) to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation and maintenance repair, rehabilitation and replacement of flood control facilities.	20,919,000	205,000
Pay 30 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to one-third for Phase II Continuing work and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	65,919,000	$1,174,000
Total non-Federal Costs	$119,550,000	$1,379,000

The non-Federal sponsor has agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Chapter 2188, Statutes of the State of California, approved by the Governor on July 21, 1961, established the State Reclamation Board as the agency to meet the requirements of local cooperation for the project. Assurances of local cooperation were accepted from the Board February 5, 1963. The Reclamation Board signed a Local Cooperation Agreement (LCA) satisfying the requirements of Section 221, Flood Control Act of 1970 (Public Law 91-611) for the remaining Second Phase work in May 1984. In accordance with provisions of the Water Resources Development Act (WRDA) of 1986 for separable project elements initiated after April 30, 1986, new LCAs were executed for separable element 41 on August 15, 1988 and for separable elements 38B, 40, and 42 on December 7, 1988. The LCA for the First Phase Mitigation was signed on June 5, 1990. The Project Partnership Agreement date for the additional authorized 80,000 linear feet is scheduled for April 2014.

The current non-Federal cost estimate of $119,550,000 is a decrease of $52,090,000 from the latest estimate presented to Congress (FY2013).

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $283,970,000 is a decrease of $82,630,000 from the latest estimate, $366,600,000, presented to Congress (FY 2013). This change includes the following:

Item	Amount
Price De-escalation on Construction Features	($ 2,708,000)
Post contract Award and Other Estimating Adjustments	(79,922,000)
Total	($82,630,000)

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A final Environmental Impact Statement (EIS) was filed on June 15, 1973. A Supplemental Environmental Impact Statement (SEIS) for the Second Phase was filed in February 1989. A final EIS for additional work in Butte Basin, and an update submitted as Supplement 4, were signed in June 1988. An Environmental Assessment/Site Specific Report (EA/SSR) was prepared for Contract 42A and a Finding of No Significant Impacts (FONSI) was signed on February 15, 1994. An EA/SSR was prepared for contracts Lower American River site 3 and 40D and FONSIs were signed July 2, 1996 and September 3, 1997, respectively. A Supplemental Design Memorandum No. 8 was prepared for sites along the lower American River and the SEIS was completed in April 1998. Currently, an EA/SSR to meet both Federal and State of California requirements is approved prior to construction of each bank protection contract. The EA for sites to be constructed in 2011 was approved June 2009. An EIS/EIR (Environmental Impact Report) is being prepared in support of the PACR for the WRDA 2007 80,000 linear foot additional authorization.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1962, and for construction in FY 1963. Construction of the first phase was completed in November 1974. Authority to proceed with additional bank protection work, second phase, was provided by Section 202, River Basin Monetary Authorization Act of 1974, Public Law 93-251. The Further Continuing Appropriations Act of 1983, Public Law 97-377, extended the limits of the project to include bank protection along the Sacramento River to the upstream ends of the project levees to Chico Landing (Butte Basin area). WRDA of 1986 modified the first phase of the project to include acquisition of lands for establishment and maintenance of wildlife habitat at a total cost of $1,410,000 ($2,120,000 inflated through construction). The last parcel was acquired in FY1997. Monitoring of fish and wildlife habitat and engineering features continues at each site.

The USFWS, by letter dated November 7, 1985, issued a BO stating that the bank protection work along the Sacramento River from Chico Landing to Red Bluff and in the Butte Basin area would endanger the threatened valley elderberry longhorn beetle. The Service issued a revised opinion on May 19, 1987 that permitted limited rock revetment bank protection to be constructed in the Butte Basin. The potential impact to winter-run salmon has also been a significant concern as the winter-run salmon have experienced an alarming decline since 1969. The National Marine Fisheries Service (NMFS) listed winter-run salmon as a threatened species in November 1990. The winter-run salmon biological data report was completed January 1991. NMFS Biological Opinion dated October 28, 1991 for the winter-run salmon was non-jeopardy but lists recommended conservation measures. Winter-run salmon, along with bank swallows and Swainson's Hawk, are also State listed species. A Biological Opinion was received from California Department of Fish and Game on November 18, 1991 which also recommends conservation measures.

On August 23, 2001, the U.S. Fish and Wildlife Service issued its final Biological Opinion on the SRBPP. The NMFS released their opinion on September 27, 2001. Both opinions were virtually identical in terms of identifying the SRBPP's effects as jeopardizing the existence of five fish species (Delta smelt, Sacramento splittail, winter-run Chinook salmon, spring-run Chinook salmon, and Central Valley steelhead) listed under the Endangered Species Act in the Sacramento River. With recent collaborative efforts, most repair sites have been self-mitigating.

OTHER INFORMATION (continued):

After the February 1986 flood, the Sacramento River System experienced below normal precipitation and flood flows. This led to a lower rate of erosion and a lowered need for expedited bank protection work. However, the storms of 1995 and 1997, plus the sustained high water in 2006, have caused substantial erosion damage and the urgency for bank protection still exists.

The 2005 and 2006 Erosion Inventory Reconnaissance Report identified 57 Critical Erosion Sites which resulted in an emergency declaration by Governor Schwarzenegger. The Department of Water Resources (DWR) and the Corps repaired 33 sites beginning in fiscal year 2006 and completing in fiscal year 2007. During the first quarter of FY 2008, 24 sites (10 DWR led and 14 Corps led) were repaired. Eight sites were constructed in 2008. The state of California has provided accelerated funds with the aid of a LCA amendment, executed May 5, 2006, allowing the project to accept funds ahead of the cost share balance, so that work on the sites may proceed unimpeded. Ten new sites were constructed in 2009 totaling 8,200 lineal feet. Construction contract was awarded in FY 2010 for a setback levee on RM 57.2 in West Sacramento. O&M manuals have been started in FY 2010 for turnover. Additional designs were done in FY 2010 for a construction award on 4 new sites in FY 2011. Annual erosion inventory was completed in FY 2010 and FY 2011. Designs for several new sites were started in FY 2011 and scheduled for completion in FY 2012. Construction of 4 new erosion sites was completed in FY 2012. These sites are currently under plant establishment. A new contract is scheduled for award in August 2012 for years 2 and 3. O&M manuals for 7 sites are current in the process to be turned over to the non-federal sponsor in FY 2012. A Value Engineering study was completed in FY 2012 for 7 new sites. Final plans and specs are to be completed for 7 sites in 2012.

The Flood Control Act of 1960 included no quantitative language concerning the benefits or costs but authorized the rehabilitation of 430,000 lineal feet of levee. In 1974 language was added to increase the lineal feet by an additional 405,000 feet. WRDA 2007 authorized an additional 80,000 lineal feet for a total of 915,000 lineal feet.

A new cost estimate was approved in October 2011 as part of the PACR to address the latest WRDA 2007 authorization of an additional 80,000 linear feet of river bank protection work. The PACR (including an EIR/EIS) is expected to be completed Dec 2013. The Project Management Plan (PMP) for phase III and a Feasibility Cost Share Agreement (FCSA) will be complete in FY13. The GRR will be initiated in FY2014 with investigations funds for 500,000 LF of bank

protection and it will be completed in three years, per the 3X3X3 smart planning guidance. Benefits are from the 2011 Economic Update and addendum, dated 31 October 2011 at October 2010 price levels. Only 21 out of the 45 basins were looked at; only seven of the 21 impact areas are economically justified at an interest rate of 7% (Butte, Sutter Island, Natomas, West Sacramento, Southport, Yolo and Sacramento). Justification for the additional impact areas will be updated in future economic analyses.

The fish and wildlife mitigation cost is estimated at $31 million.

Carry-in funds of $850,000 are being used to continue work on the Post Authorization Change Report.

COMPLETED WORK

FIRST PHASE, BANK PROTECTION
CONTRACTS 1 THRU 26 (430,000LF)

SECOND PHASE, PART 1 BANK
CONTRACTS 27 THRU 36 (182,000 LF)

SECONT PHASE PART 2, BANK PROTECTION:
PRE-SEPARABLE ELEMENT (46,744 LF)
37 (RM0-62)
38A (RM 60-145)
39 (RM 177-194)

SEPARABLE ELEMENT 38B (14,436)
38B (RM 60-120)

SEPERABNLE ELEMENT 40 (40,794 LF)
EMERGENCY COUNTY ROAD 29
(RM 186-188)
40A (RM 132-1800
40B-1 (RM 187-192)
40B-M (RM 145-194)
40C (RM 15-25)
STEAMBOAT, MINER & SUTTER 40C-M
(RM 15-25)
40D (RM 16, 1R) STEAMBOAT SL.
40D-M (RM SL16.1)
40E (RM 149)

SEPARABLE ELEMENT 41 (29,475 LF)
41A (RM 20-60)
41A-M1 (RM 20-60)
41A-M2 (RM 20-60)
41A-M3 (RM 20-60)
41A-M4 (RM 20-60)
41A-M5 (RM 20-60)
41B (FEATHER RIVER)
41B-M (FEATHER RIVER)

COMPLETED WORK (CONT.)

SECOND PHASE PART 2, BANK PROTECTION (CONT.)
SEPARABLE ELEMENT 42 (17,362 LF)
42A (RM 60-145)
42A-M (RM 60-145)
42A-M1 (RM 60-145)
42C (RM 90.4 &90.9) FISH CURT.
42C-M (RD 108-COLUSA BASIN)
42D (RD 108-COLUSA BASIN)
42D-M (RD 108-COLUSA BASIN)
LAR 1A2 (RM 4.4, SITE 3 RIVER PARK)
LAR 1A2-M (RM 4.4, SITE 3 RIVER PARK)
LAR 1A3-M (RM 4.4, SITE 3 RIVER PARK)
LAR 1B (RM 2-9, SITE 1,2 & 4)
LAR 1B (RM 2-9, SITE 1,2 & 4)
LAR 2 (SITE 5, PHASE 1)
LAR 2 (SITE 5, PHASE 2)
LAR 2-M (SITE 5, PHASE 3)
LAR 10.0L
LAR 10.6L

SACRAMENTO RIVER MILE – CACHE SLOUGH

49.6L	53.5R	21.8R
49.7L	56.7L	STEAMBOAT SLOUGH
49.9L	26.9L	16.6R
50.2L	34.5R	
50.4L	72.2R	FEATHER RIVER RM 3.6L
50.8L	99.3R	7.0L
51.5L	123.5L	
52.3L	177.8R	SUTTER BYPASS 0.4
53.1L	87.0R	
93.7L	42.7R	AMERICAN RIVER
136.7L	73.5R	0.3L
136.9L	114.5R	2.8L
42.7R	42.7R	
77.2L		

COMPLETED WORK (CONT)

WORK PROPOSED
WITH FY13 FUNDS

SACRIVER MILE: 71.3R
157.7R

WORK PROPOSED
WITH FY14 FUNDS

130.0 L
41.9 R
26.0 L
55.2 L
16.8 L

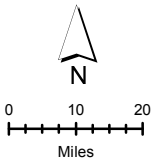
Local Protection Projects - Flood Control

Sacramento River Bank Protection Project California

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District

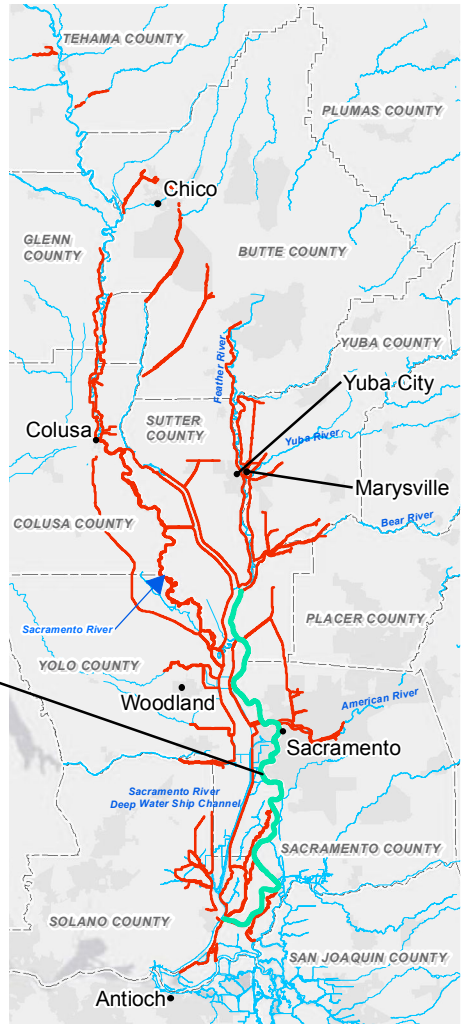
1 January 2013



BANK PROTECTION SITES ACCOMPLISHED UNDER THE FIRST PHASE OF THE SACRAMENTO RIVER BANK PROTECTION PROJECT

[FY 13] 3500 LINEAL FEET

[FY 14] 3505 LINEAL FEET



Legend

- Levees
- Bank Protection Sites

Work Status

Completed - Work completed as of 30 September 2012

[13] Work proposed with funds available for FY 2013

[14] Work proposed with funds available for FY 2014

Remaining - Work required to complete the project after FY 2014

Local Protection Projects - Flood Control

Sacramento River Bank Protection Project California

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers,
South Pacific Division,
Sacramento District

1 January 2013

APPROPRIATION TITLE: Construction - Local Protection (Flood Risk Management)

PROJECT: Santa Ana River Mainstem, California (Continuing)

LOCATION: The project is located along a 75-mile reach of the Santa Ana River in Orange, Riverside, and San Bernardino Counties, southeast and adjacent to metropolitan Los Angeles, California.

DESCRIPTION: The plan of improvement provides for construction of the Seven Oaks Dam about 35 miles upstream of the existing Prado Dam, with a gross reservoir storage of 145,600 acre feet; flood plain management of the flood overflow area on the Santa Ana River between Seven Oaks Dam and the existing Prado Reservoir; enlargement of Prado Dam to increase the reservoir storage capacity from 217,000 acre-feet to 362,000 acre-feet; construction of 3.3 miles of channel modifications along Oak Street Drain in Corona; enlargement of the existing 2.4 miles of Mill Creek levee; construction of a detention basin and 2.0 miles of channel modifications along the Santiago Creek; and various means of flood control, including flood plain management, levees, and vertical walled concrete channels along the 30.5 miles of the Santa Ana River from Prado Dam to the Pacific Ocean. In addition, the plan includes flood protection improvements along San Timoteo Creek, which was added to the project by the Energy and Water Development Appropriation Act of 1988. The project was then modified by the Water Resources Development Act of 1990, which authorized the Secretary to develop recreational trails and facilities on lands between Seven Oaks Dam and Prado Dam, including flood plain management areas.

AUTHORIZATION: Water Resources Development Act of 1986, Energy and Water Development Appropriation Act, 1988, Water Resources Development Act of 1990, Water Resources Development Act of 1996, and Water Resources Development Act of 2007.

REMAINING BENEFIT-REMAINING COST RATIO: 4.5 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8 5/8 percent (FY 1988)

BASIS OF BENEFIT-COST RATIO: The benefit-cost ratio is based on a Level I Interim Economic Update Report dated June 2011. The Level III Economic Re-evaluation Report will be available in 2013.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$1,317,000,000		Seven Oaks Dam	100	November 1999
Programmed Construction	1,247,000,000			Prado Dam	60	TBD
Unprogrammed Reimbursement	70,000,000			Santiago Creek	10	TBD
LERRD	34,000,000 7/			Mill Creek	100	April 1992
Judgment Fund	36,000,000 8/			Oak Street Drain	100	January 1996
				Lwr SAR Rch 9 & SARI Line	75	TBD
Estimated Non-Federal Cost		$804,000,000		Lower Santa Ana Rch 1-8,10	100	July 2011
Programmed Construction	$804,000,000			Marsh	100	March 2013
Cash Contributions	$107,000,000			San Timoteo	100	November 2007
Other Costs	$731,000,000					
LERRD Reimbursement	($34,000,000)			Total Project	84	TBD
Total Estimated Programmed Construction Costs		$2,051,000,000				
Total Estimated Project Cost		$2,121,000,000				
Allocations to 30 September 2010	$990,604,000					
Allocation for FY 2011	$22,934,000					
Allocation for FY 2012	$23,090,000					
Conference Allowance for FY 2013	$7,200,000					
Allocations through FY 2013	$1,043,828,000	1/2/3/5/	84			
Estimated Unobligated Carry-In Funds	$0	4/				
President's Budget for FY 2014	$42,000,000		87			
Programmed Balance to Complete after FY 2014	$161,172,000	6/				
Un-programmed Balance to Complete after FY 2014	$70,000,000	7/8/				

1/ $0 estimated reprogrammed to (from) project.
2/ $0 rescinded from the project.
3/ $0 transferred to the Flood Control & Coastal Emergencies account.
4/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A
5/ PED Costs of $25,200,000 are included in this amount.
6/ For programmed work only, remaining items are un-programmed pending specified funding for reimbursement.
7/ Estimated reimbursement to sponsor for LERRD over 45% on the Prado Dam separable element.
8/ Federal portion of reimbursement for a total of $38,500,000 owed to Treasury Judgment fund for a contract claim on the Seven Oaks Dam feature.

PHYSICAL DATA:

SEVEN OAKS DAM:
Dam: Type - Impervious core
Height - 550 feet
Length - Crest Length 2,980 feet
Outlet Works: Gated conduit, 8,000 cfs maximum discharge
Basin Capacity: 145,600 acre-feet
Spillway: Type - Detached overflow, 500 ft wide, unlined
Embankment: Earth and Rock fill
Lands & Damages: Acres - 2,736 existing streambed and undeveloped (mountainous)
Water Quality Study

MILL CREEK:
Levee repair: Type - Grouted riprap
Height - 10 feet maximum
Length - 12,500 feet (2.4 miles) of existing
13,600 feet (2.6 miles)
Lands & Damages: Acres – 1661 grazing, wildlife
Floodwall (Top of levee): Type – Concrete
Height - 7.5 feet maximum
Length - 12,600 feet (2.4 miles)

OAK STREET DRAIN:
Channel: Rectangular concrete 3.0 mile
Trapezoidal riprap 0.3 miles
Lands & Damages: 34 acres for rights-of-way

SAN TIMOTEO CREEK:
Channel: 5.4 miles trapezoidal concrete
Basins: 18 in-channel and transition chute
Lands & Damages: 60.3 acres for rights-of-way

SANTIAGO CREEK:

Channel: Rectangular concrete 500 feet Trapezoidal riprap 2.0 miles
Reservoir: Buttressed Basin
Capacity: Flood control 4,620 acre-feet (el. 274 to 298)
Lands and Damages: 281.5 acres, reservoir and channel

PRADO DAM:

Dam: Type - Impervious core
Height - 134 feet
Length - 3,050 crest length
Outlet Works: Gated conduits
30,000 cfs maximum discharge
Embankment: Rolled earth fill
Spillway: Type - Detached, overflow concrete, 1,000 feet wide,
578,000 cfs maximum design discharge.
Basin Capacity: 362,000 acre-feet
Interior Basin Dikes: 8

LOWER SANTA ANA RIVER:

Channel: - 200-450 feet wide,
34 bridges replaced or modified
Relocate sewage and brine line (SARI) Santa Ana River Interceptor Line
- 5.0 miles trapezoidal concrete
- 2.4 miles rectangular concrete
- 15.5 miles trapezoidal grouted riprap
- 0.8 miles rectangular concrete/soft bottom
Lands & Damages: Acres - 2,429.5 for channel (7.4 miles floodway)
Mitigation Lands: Acres – 8 marshland
Enhancement Lands: Acres - 84 marshland enhancement

JUSTIFICATION: The project will provide protection for surrounding areas stretching over three major metropolitan areas Orange, San Bernardino and Riverside counties, however, protection benefits are primarily to lands and improvements within Orange County, downstream of Prado Reservoir. A severe flood threat exists in this area, which could threaten the population of approximately 2,000,000 residents and cause damage to nearly 300,000 structures with an estimated value of $112 Billion. Damages upstream of Prado Reservoir could exceed $450,000,000. The overflow area comprises 160 square miles of primarily urban development in 15 cities including San Bernardino, Riverside, Anaheim, Orange, Santa Ana, Fountain Valley, Costa Mesa, Huntington and Newport Beach. The flood of 1938 is the largest that has been recorded since accurate stream gages were placed in the Prado basin. With a peak flow at Riverside Narrows of approximately 100,000 cubic feet per second, the flood covered thousands of acres of then predominantly rural Orange County. Although the area was largely agricultural at the time, the flood caused $4,000,000 in damages ($141,000,000 at 2009 prices). Following this storm, Prado Dam was constructed at the head of the Santa Ana Canyon, providing effective control of floods for much of the downstream basin. In 1969, when communities upstream of Prado Dam suffered $85,000,000 in damages, Prado Dam prevented an estimated $525,000,000 in damages to downstream communities. Without the project, the level of protection downstream of Prado, primarily in Orange County, is approximately 70 years. With the project, the level of protection downstream of Prado would be increased to 190 years.

While many parts of the lower river have been completed, the remaining Reach 9 feature is essential toward protecting the highly urbanized lower Santa Ana River basin. Additional areas of the Reach 9 channel known as the Burlington Northern Santa Fe (BNSF) Railway bridge, Phase 4 (Reinforce embankment Coal Canyon) and Phase 5 (Reinforce embankment Yorba Linda) have recently been identified as requiring scour protection from the designed Prado dam releases of 30,000 cubic feet per second (cfs). Operation of Prado dam at the design level is contingent upon completing the Reach 9 channel improvements, including additional scour areas and the Santa Ana River Interceptor (SARI) line relocation. A scour study was completed in 2011 as an engineering investigation in relocating the SARI Line in the Orange County portion of the Santa Ana River. This study was more detailed than previous studies due to the need to determine more accurate scour elevations for the SARI Line beneath the Santa Ana River. The new analysis indicates a more aggressive scour and river channel degradation rate than previous studies calculated when the General Design Memorandum for the Reach 9 features was completed (1988). A review of Reach 9 flood and scour protection measures was undertaken to ensure infrastructure adjacent to Reach 9 would not be damaged by flood waters when the design flood event (30,000 cfs) is released from Prado Dam. The recent analysis indicated that the existing embankment protection and toe depth elevations at the locations identified as Phases 4 and 5 would not be sufficient and would need additional embankment reinforcement. Once completed, the designed releases will reduce flow over the spillway, preventing a probable maximum flood from eroding the side walls and causing major damage to the surrounding communities. The lower Santa Ana River 500 year floodplain is centered over the most densely populated and urbanized portion of Orange County that has the 10th largest industrial office and warehouse market in the United States with over 271 million square feet of space and a less than 4 percent vacancy rate. The gross county product was estimated at $184 Billion in 2011.

A key component of the Reach 9 feature is scour protection of the Burlington Northern Santa Fe (BNSF) Railway bridge situated in the river. Damage would result in shutting down the movement of goods through a high traffic rail corridor, impacting segments of the economy along this route from California to Florida. This rail line handles 2/3 of freight shipped from Port of Long Beach & railed out to the continental United States, widely known as the Alameda Corridor. Potential damages to the bridge from a project flood event would cripple operations at the Port with an estimated 4,700,000 containers & tonnage of 75,000,000 handled yearly, causing a major economic impact to the entire Southern California area.

Over 1,500 private & public sector jobs are associated with ongoing construction activities in Reach 9. A halt in work would have a considerable impact on Riverside County and the inland area that has an unemployment rate 50% higher than the National average.

JUSTIFICATION: (Continued)

Local and State agencies have created a joint powers authority, the Santa Ana Watershed Project Authority that have developed a prioritized list of State and locally funded projects for the watershed. In developing the watershed pilot budget, many of the stakeholders have indicated that completion of Reach 9 is required prior to the initiation of a majority of the non-Federally funded projects in the watershed.

If requested funding for fiscal year 2014 is not received, there will be major delays in the Reach 9 construction schedule, impacting the operation of the Prado Dam. If a major storm event were to occur requiring large releases from the dam, this could cause major damages along the unprotected areas of Reach 9 and ultimately require additional study and design for future protection efforts, further delaying the completion of the Reach 9 feature and the ability of Prado Dam to operate at the design level of 30,000 (cfs)

Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Prevention	$ 231,801,000
Recreation	282,000
Total	$ 232,083,000

FISCAL YEAR 2013: The TOTAL unobligated dollars are being used as follows:

Award construction contract for Reach 9 Phase 3	$6,660,000
Complete Seven Oaks Dam Water Quality Study	1,600,000
Construction Management, Supervision & Administration of Marsh dredging contract	400,000
Total	$8,660,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Construction Management, Supervision & Administration, Engineering & Design and mitigation efforts for the ongoing Reach 9 contracts	$ 7,600,000
Award BNSF Railroad Bridge Protection construction contract for Reach 9 Phase 2A	22,000,000
Award Reach 9 Phase 4 construction contract	12,000,000
Continue Seven Oaks Dam mitigation efforts	400,000
Total	$42,000,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsors must comply with the following requirements listed below.

Requirements of Local Cooperation and Project Cooperation	Payments During Construction And Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Santa Ana River Mainstem:		
Provide lands, easements, rights-of-way, and borrow, excavated or dredged material disposal areas.	$ 158,000,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	185,000,000	
Pay 5 percent cash of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 31 percent, and bear all cost of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	68,000,000	$ 2,194,000
Reimburse 100 percent of the Federal funds, loaned to the sponsor for work on San Timoteo Creek, within a period of 30 years following the completion of the project, in accordance with section 103 (k) of the Water Resources Development Act of 1986.	6,000,000	
Prado Dam (Separable Element):		
Provide lands, easements, rights-of-way, and borrow, excavated or dredged material disposal areas.	350,000,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	32,000,000	
Pay 5 percent cash of the costs allocated to flood control to bring the total non-Federal Share of flood control costs to 50 percent, and bear all costs of operation, maintenance, Repair, rehabilitation and replacement of flood control facilities.	39,000,000	200,000
Estimated reimbursement to local sponsor for LERRDS in excess of 45 percent of total project costs for flood control, subject to availability of funds.	(34,000,000)	
Total Non-Federal Costs	$ 804,000,000	$ 2,394,000

The non-Federal sponsors have also agreed to make all required payments concurrently with project construction.
STATUS OF LOCAL COOPERATION: Orange, San Bernardino, and Riverside Counties are the local sponsors. On 14 December 1989, the Local Cooperation Agreement was executed in compliance with the requirements of the Water Resources Development Act of 1986. A supplemental Local Cooperation Agreement was executed on 1 July 1994 for San Timoteo Creek. On 30 June 1997, the Assistant Secretary of the Army (Civil Works) approved Prado Dam as a separable element and direction was given by the Assistant Secretary of the Army (Civil Works) to proceed in accordance with Section 309 (Water Resources Development Act of 1996) to modify the existing Local Cost Sharing Agreement to reflect this determination and the non-Federal cost-sharing be modified in accordance with section 103(a) (3) of Water Resources Development Act of 1996. A Project Cooperation Agreement for Prado Dam was executed in February 2003.

The current non-Federal cost estimate of $804,000,000, which includes a cash contribution of $107,000,000, is an increase of $276,000,000 from the non-Federal cost estimate of $528,000,000 noted in the current amended Local Cooperation Agreement dated February 2003, which included a cash contribution of $59,306,000. Analysis of the non-Federal sponsors' financial capability to participate in the project affirms that Riverside and San Bernardino Counties still have a reasonable plan for meeting their financial commitments. Orange County has recently identified a possible funding shortfall that may impact the schedule for acquiring lands in Prado basin.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $1,317,000,000 is an increase of $42,000,000 from the latest estimate $1,275,000,000 presented to Congress (FY 2012). This change includes the following items.

Item	Amount
Price leveling, inflation and other adjustments (including contingency adjustments) (Prado Spillway & Santiago Creek)	$14,000,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments) (Reach 9/Prado Dikes)	23,000,000
Schedule Changes (Prado Spillway/Santiago Creek/Seven Oaks mitigation)	5,000,000
Total	$42,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency in June 1989. The Records of Decision (ROD) for Prado Dam and San Timoteo Creek Reach 3B were executed in January 2002. Additional supplement environmental documents have been prepared prior to construction of each feature.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1979. Funds to initiate construction were appropriated in 1990, and the project has consistently been in the President’s Budget every year since.

An agreement with Fish and Wildlife Service on Section 7 consultations for endangered species (including Santa Ana wooly star and spineflower below Seven Oaks and Least Bell's vireo at Prado Dam) was reached on the number of acres for types of mitigation. The final biological opinion (BO) necessary for formal

conclusion of the consultation was received from Fish and Wildlife Service 22 June 1989. Subsequently, San Bernardino Kangaroo Rat was emergency listed and Seven Oaks Dam construction was stopped in January 1998. Through formal consultation, the Fish and Wildlife Service issued two Biological Opinions in February 1998 and December 2002 which allowed dam construction to continue and included future dam operation. Newly listed species, Santa Ana Sucker and designated critical habitat for the Least Bell vireo at Prado dam required additional consultation, which was completed in December 2001.

OTHER INFORMATION: (Continued)

Coordination with the U.S. Fish and Wildlife Service and the California Department of Fish and Game was initiated early in the planning of alternatives and completed 30 March 1989, which produced a Fish and Wildlife Service Coordination Act Report that was included in the Environmental Impact Statement. These agencies had a role in the determination of project associated impacts as well as mitigation needs and opportunities. The estimated fish and wildlife mitigation cost for Seven Oaks Dam is $10,000,000, for San Timoteo is $4,100,000, for Lower Santa Ana is $15,000,000 and for Prado Dam is $18,000,000.

The project was modified by Section 104 of the Energy and Water Development Appropriation Act of 1988, which authorized the construction of San Timoteo Creek in the vicinity of Loma Linda as part of the Santa Ana River Mainstem Project and the total costs for the Santa Ana Mainstem, including Santiago Creek, was raised by $25,000,000. Construction was initiated in August 1994 and completed in November 2007 with funds specifically identified in Act Language for a total of $76,650,000.

The project was modified by the Water Resources Development Act of 1990, which authorized the Secretary to develop recreational trails and facilities on lands between Seven Oaks Dam and Prado Dam, including flood plain management areas. These features are not included in the current estimate pending development of plans, determination of costs and support from local sponsors.

The project was modified by the Water Resources Development Act of 1996, which authorized the Secretary in coordination with the State of California, to provide technical assistance to Orange County, California, in developing appropriate public safety and access improvements associated with a portion of California State Route 71, which has been relocated for the Prado Dam project.

Congressional language in the Water Resources Development Act of 2007 increased the project cost to $1,800,000,000 and included the Santa Ana River Interceptor line (SARI) as an authorized element of the project. This authority sufficiently increased the 902 maximum authorized total project cost to cover the added SARI line relocation, which is a 100% non-federal cost.

Total Lands, Easements, Rights of Ways, Relocations and Disposals (LERRD) for the Prado Dam project is being estimated above 45 percent of the total project cost for flood control. Upon completion of the project and final accounting, the government, subject to availability of funds, shall reimburse the Non-Federal sponsor for any such value in excess of 45 percent of total project costs to bring the ultimate cost sharing to 50 percent Federal and 50 percent Non-Federal for the Prado Dam Project.

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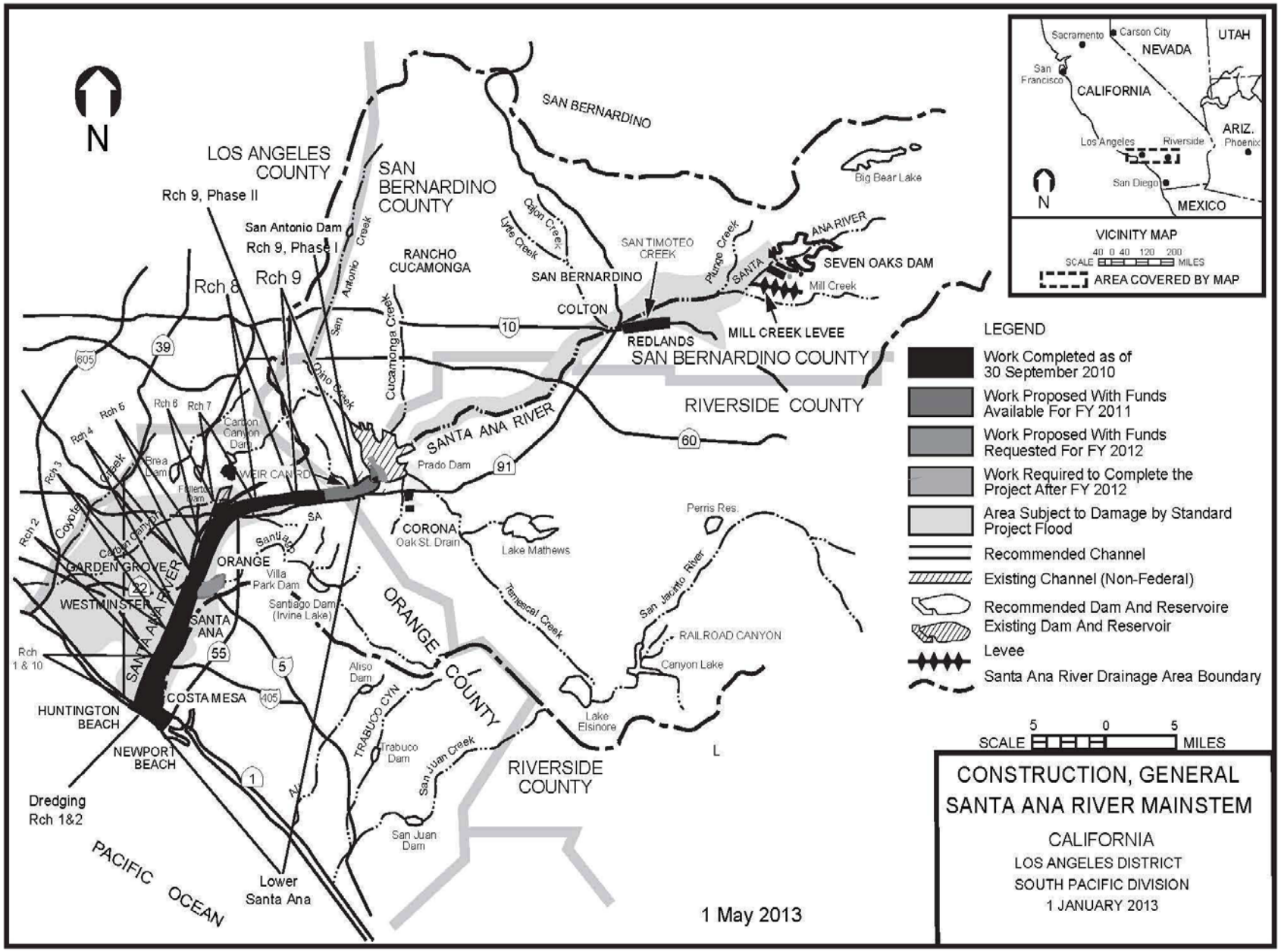


CONSTRUCTION, GENERAL
SANTA ANA RIVER MAINSTEM

CALIFORNIA
LOS ANGELES DISTRICT
SOUTH PACIFIC DIVISION
1 JANUARY 2013

SPD-101

APPROPRIATION TITLE: Construction - Local Protection (Flood Risk Management)

PROJECT: Yuba River Basin, California (Continuing)

LOCATION: The project is located on the left bank of the Feather River in northern California in Yuba County approximately 50 miles north of Sacramento.

DESCRIPTION: The project, as authorized, includes constructing or deepening of slurry walls, deepening toe drains, constructing or modifying berms to strengthen existing levees on the Yuba and Feather Rivers and Jack Slough to provide increased flood risk management benefits to three reaches: Reach 1 (Linda/Olivehurst), Reach 2 (Lower Reclamation District (RD) 784), and Reach 3 (Marysville).Project sponsors have completed improvements to all of the existing levees in Reach 1 and Reach 2 and have requested credit to be applied towards the non-Federal cost share of the of the Marysville (Reach 3) element, the only element of the authorized Yuba River Basin being constructed by the Government. The Reach 3 (Marysville) element is under construction. To facilitate construction, the project has been broken up into geotechnical sections based on factors of safety due to seepage and other items in order to streamline the contracting approach. These geotechnical sections are conveyed herein as phases 2A, 2B, 2C, 3 and 4. PHASE 2A - The project is situated on the levee in the southwestern part of the city of Marysville with Riverfront Park. The project consists of a 2,600 foot long seepage control cutoff wall constructed parallel with the levee using a slurry trench method to produce an impermeable barrier of a mixture of native soil and bentonite clay, commonly referred to as soil- bentonite (SB). The depth of the cutoff varies from 30 to 60 feet deep and the width is 3 feet. PHASE 2B - The project is situated on the levee in the southeastern part of the city of Marysville near the historic downtown area. The project consists of a 4,000 foot long seepage control cutoff wall constructed parallel with the levee using a slurry trench method to produce an impermeable barrier of a mixture of native soil and bentonite clay, commonly referred to as soil- bentonite (SB). The depth of the cutoff varies from 30 to 60 feet deep and the width is 3 feet. PHASE 4 - The project is situated on the levee in the northwestern part of the city of Marysville near State Highway 70 and crossing of two UPRR railroad tracks. The project consists of a 600 foot long, 15 foot wide by 7 foot tall stability berm constructed parallel with the levee abutting the landside of the levee. The project would use unsuitable levee material recycled from other MRL phases to construct the berm. This phase also includes a small portion of levee crest reconstruction. PHASE 2C - The project is situated on the levee in the southern part of the city of Marysville. The project consists of a three seepage control cutoff walls constructed parallel with the levee using a slurry trench method to produce an impermeable barrier of a mixture of native soil and bentonite clay, commonly referred to as soil- bentonite (SB). Deep Soil Mixing (DSM) methods may be utilized from STA 208+00 to STA 210+00 to construct the cutoff wall in the vicinity of the bridge abutments. The depth of the cutoff varies from 30 to 60 feet deep and the width is 3 feet. PHASE 3 - The project phase may be subdividing into 4 subphases depending on funding and design refinements. The project is situated on the levee in the southeastern part of the city of Marysville near the historic downtown area. The project consists of a 4,000 foot long seepage control cutoff wall constructed parallel with the levee using a slurry trench method to produce an impermeable barrier of a mixture of native soil and bentonite clay, commonly referred to as soil-bentonite (SB). The depth of the cutoff varies from 30 to 60 feet deep and the width is 3 feet.

The programmed portion of this project includes the Reach 3, Marysville Ring Levee (MRL). The unprogrammed portion of the project includes the study in progress to confirm the Federal interest in the authorized project improvements in Reach 1 and Reach 2; and to evaluate the completed work by the project sponsors in these reaches for credit eligibility (see OTHER INFORMATION).

AUTHORIZATION: Water Resources Development Act, Pub. L. 110-114, § 3041, 121 Stat. 1041, 1116 (2007); Water Resources Development Act, Pub. L. 106-53, § 101(a)(10), 112 Stat. 269,275 (1999)

Separable Element 1 – Reach 3 (Marysville Ring Levee)

REMAINING BENEFIT-REMAINING COST RATIO: 2.2 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.7 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 2.3 to 1 at 4 1/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the evaluation contained in the Yuba River Basin Investigation, California, Economic Reevaluation Report (ERR) dated August 2011 at October 2011 price level. The ERR for the MRL was approved by Division on October 31, 2011.

Separable Element 2 – Reaches 1 and 2

REMAINING BENEFIT-REMAINING COST RATIO: TBD (see OTHER INFORMATION).

TOTAL BENEFIT-COST RATIO: TBD (See OTHER INFORMATION).

INITIAL BENEFIT-COST RATIO: 3.4 to 1 at 6-1/8 percent (see OTHER INFORMATION).

BASIS OF BENEFIT-COST RATIO: RD 784 has two separable elements from the Yuba River Basin Investigation, California, Final Feasibility Report and Appendixes, April 1998. An economic analysis (October 2012 price level) was performed in support of the Reach1 (Linda/Olivehurst) Post Authorization Documentation Report dated June 2012. The upper Reach 1 was economically feasible in this report with net benefits of $2.1 million and a total benefit-cost ratio of 1.44 to 1. The evaluation of Reach 2 (Lower RD 784) has not been completed, but preliminary studies indicate that the completed local improvements are economically feasible. However no Federal decision is considered necessary for Reach 2 at this time since there is no additional Federal action to be supported..

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$110,567,500				
Programmed Construction	70,000,000					
Unprogrammed Construction	40,567,500					
Estimated Non-Federal Cost		$ 37,700,000				
Programmed Construction	37,700,000					
Cash Contributions	33,584,000					
Other Costs	4,116,000					
Estimated Non-Federal Cost		$ 21,836,500				
Unprogrammed Construction	21,836,500					
Cash Contributions	19,315,500					
Other Costs	2,521,000					
Total Estimated Programmed Construction cost		$107,700,000				
Total Estimated Unprogrammed Construction Cost		$ 62,404,000				
Total Estimated Project Cost		$170,104,000				
Separable Element 1 – Reach 3 (Marysville Ring Levee, MRL)						
Estimated Federal Cost		$ 65,461,500		Reach 3	8	TBD
				Reaches 1 & 2	1	Unsched.
Estimated Non-Federal Cost		35,248,500				
Cash Contribution	$31,132,500					
Other Costs	4,116,000					
Total Separable Element 1 Cost		$100,710,000				
Separable Element 2 – Reaches 1 and 2						
Estimated Federal Cost		$ 45,106,000				
Estimated Non-Federal Cost		24,288,000				
Cash Contribution	$21,767,000					
Other Costs	2,521,000					
Total Separable Element 2 Cost		$ 69,394,000				

SUMMARIZED FINANCIAL DATA (Continued)

			ACCUM PCT OF EST FED COST	STATUS (1 JAN 2013)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Total Project Estimated Federal Cost		$110,567,500				
Estimated Non-Federal Cost		59,536,500				
Cash Contribution	$52,899,500					
Other Costs	6,637,000					
Total Project Cost		$170,104,000				

Allocations to 30 September 2010	$ 23,478,282		
Allocation for FY 2011	2,619,196		
Allocation for FY 2012	3,459,973		
Conference Allowance for FY 2013	0 1/		
Allocation for FY 2013	1,710,000 2/		
Allocations through FY 2013	33,067,451 3/	30	
Estimated unobligated Carry-In Funds	0 4/		
Budget amount for FY 2014	1,800,000	32	
Programmed Balance to Complete after FY 2014	35,132,549		
Unprogrammed Balance to Complete after FY 2014	$ 40,567,500 5/		

PHYSICAL DATA

Levee Improvements:
Slurry Walls (Reaches 1 and 2) – 6.7 miles
Toe Drains (Reaches 1 and 2) - 9.0 miles
Berms (Reaches 1 and 2) - 9.5 miles
Slurry walls and berms along ring levee (Reach 3) – 5 miles

1/
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.. T
3/ Includes American Recovery and Reinvestment Act (ARRA) funding of $13,491,494.
4/ Estimated unobligated “Carry-In” Funds: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the program year from prior appropriations for use on this project effort is $0. This amount, together with the Budget Amount shown above, will be used to perform the FY 2014 project activities.
5/ The Unprogrammed Balance to Complete after FY 2014 is associated with the remaining portion of the authorized project currently being re-evaluated in the General Reevaluation Report. The current total project estimate of $110,567,500 used to develop this justification sheet was based on the currently authorized project, not the one potentially proposed in the not-yet-completed GRR.

JUSTIFICATION: The principal urban centers within the project area include Marysville and Yuba City with current populations (2010 Census) of 12,800 and

63,600, respectively. The Marysville and Yuba City areas have experienced at least six major floods which include the floods of November 1950, December 1955, December 1964, January 1965, February 1986 and January 1997, which were very widespread and destructive. Record floodflows occurred with the 1955 flood and resulted in the loss of 37 lives when a levee on the Feather River south of Yuba City failed. Modifications to flood protection facilities in the intervening 10 years, including partial completion of the State's Oroville Dam project, helped prevent damage during the 1964-65 flood that may have exceeded floodflows of the 1955 event. Approximately 100,000 acres of land were inundated during the 1955 event. Despite existing flood protection to the area, it is still vulnerable to catastrophic flooding as demonstrated by the February 1986 event. During the 1986 flood, the south levee on the Yuba River failed, inundating the towns of Linda and Olivehurst to depths of approximately 10 feet. More than 24,000 people were evacuated and damages to property were estimated at $95 million. The floods of January 1997 caused a levee break on the Feather River that was stabilized using emergency construction authority. However, over twenty square miles of land were inundated which included the Yuba City airport, roughly 800 homes, and two major highways (65 and 70). Approximately 15,000 people were evacuated and three lives were lost. Total damage of the 1997 event was estimated at $82.4 million. Flood risk management is being mitigated for Marysville Reach 3 by construction of a separable element that consists of about 5 miles of slurry walls and berms along the ring levee surrounding the city of Marysville. Following the flood in 1997, the project sponsor, using funding from the State of California Early Implementation Program, have constructed improvements to strengthen all of the levees providing FRM benefits to the Reclamation District 784 area, and have requested credit to be applied toward the non-Federal cost share for construction of the Marysville separable element; therefore, there will be no Federal construction of improvements other than the on-going Marysville separable element. The only remaining Federal action under consideration is the evaluation and affording of potential credit towards the Marysville project. The Average Annual Benefits for the Reach 3 Marysville Ring Levee are all for Flood Risk Management and are $11,856,000.

FISCAL YEAR 2013: The current amount is being used to complete design of phase 2A and Phase 4A, and initiate design of Phase 2B. Anticipate construction of Phase 4A.

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Initiate design of Reach 3, Phases 2C and 3 and continue in-house labor	$ 1,800,000
Total	$ 1,800,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended by Section 202 (a) of the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.	$ 6,637,000	
Pay 31 percent of the costs allocated to flood risk management to bring the total Non-Federal share of flood control costs to 35 percent, as determined under Section 103(m) of the Water Resources Development Act of 1986 as amended by Section 202(a) of the Water Resources Development Act of 1996 to reflect the non-federal sponsor's ability to pay and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood risk management facilities.	52,899,500	$8,000
Total non-Federal Costs	$59,536,500 6/	$8,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

6/ After approval by the Assistant Secretary of the Army (Civil Works), local credit based on ability to pay (Section 103 (m) of the Water Resources Development Act 0f 1986, as amended), or general credit for prior work (Section 104 of the Water Resources Development Act of 1986, as amended, or Section 215 of the Flood Control Act of 1968) must be reflected in the requirements of STATUS OF LOCAL COOPERATION as an offset to required cash contributions or, if necessary, Lands, Easements, Rights of Ways, Relocations and Disposals (LERRD) contributions. However, any credit provided under Section 104 of the Water Resources Development Act 0f 1986, as amended, or Section 215 of the Flood Control Act of 1968 may not be used to offset the required 5 percent cash contribution.

STATUS OF LOCAL COOPERATION: The state of California Central Valley Flood Protection Board (CVFPB) is the non-Federal sponsor for the project. The current non-Federal cost estimate of $59,536,500 includes a cash contribution of $52,899,500. A firm commitment for a cash contribution has been made by the sponsor. In a letter dated April 3, 2009, the ASA (CW) approved the sponsor's request to exercise Section 103 (L) of the WRDA 1986, deferring the sponsor's cash contribution of the MRL separable element for up to one year. This deferral expired August 3, 2011 and was not renewed. The CVFPB provided their required cash contribution for the deferred amount. The current non-Federal cost estimate reflects credits of $2,700,000 for deepening the slurry wall of Reaches 1 and 2 for prior work pursuant to Section 104 of the Water Resources Development Act of 1986. The Project Partnership Agreement was signed for the Marysville Ring Levee (Separable Element 1) on July 21, 2010.

The current non-Federal cost estimate for Separable Element 1, Reach 3, of $35,248,500, which includes a cash contribution of $31,132,500, is an increase of $2,973,500 from the non-Federal cost estimate of $32,275,000 noted in the Project Partnership Agreement, which included a cash contribution of $28,942,000. The non-Federal sponsor is aware of the cost increase and has indicated that it is financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $110,567,500 is an increase of $5,336,500 from the latest estimate ($105,231,000) presented to congress (FY 2013). This change includes the following items:

Item	Amount
Price Escalation of Construction Features	$ 375,000
Post-Contract Award and Other Estimating Adjustments	4,961,500
Total	$5,336,500

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) was filed with the Environmental Protection Agency in April 1998. Record of Decision (ROD) was signed June 28, 2000. An Environmental Assessment (EA)/Finding of No Significant Impact (FONSI) was completed and executed for the MRL in April 2010. The local sponsor prepared a supplement to the 1998 EIS/ROD as part of the Section 408 process.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design (PED) were appropriated in Fiscal Year 1998 and construction in FY 2003. Mitigation requirements for impacts to the environment from construction include 2.98 acres of woodland habitat. In accordance with the Yuba River Basin Investigation, California Feasibility Report dated April 1998, the mitigation requirement could be met by using credit from the existing mitigation site for Phase II of the System Evaluation, Marysville/Yuba City Levee Reconstruction Project. This credit resulted from excess mitigation acreage developed for Phase II of the System Evaluation. Mitigation costs are yet to be determined until a footprint is established for the un-designed area.

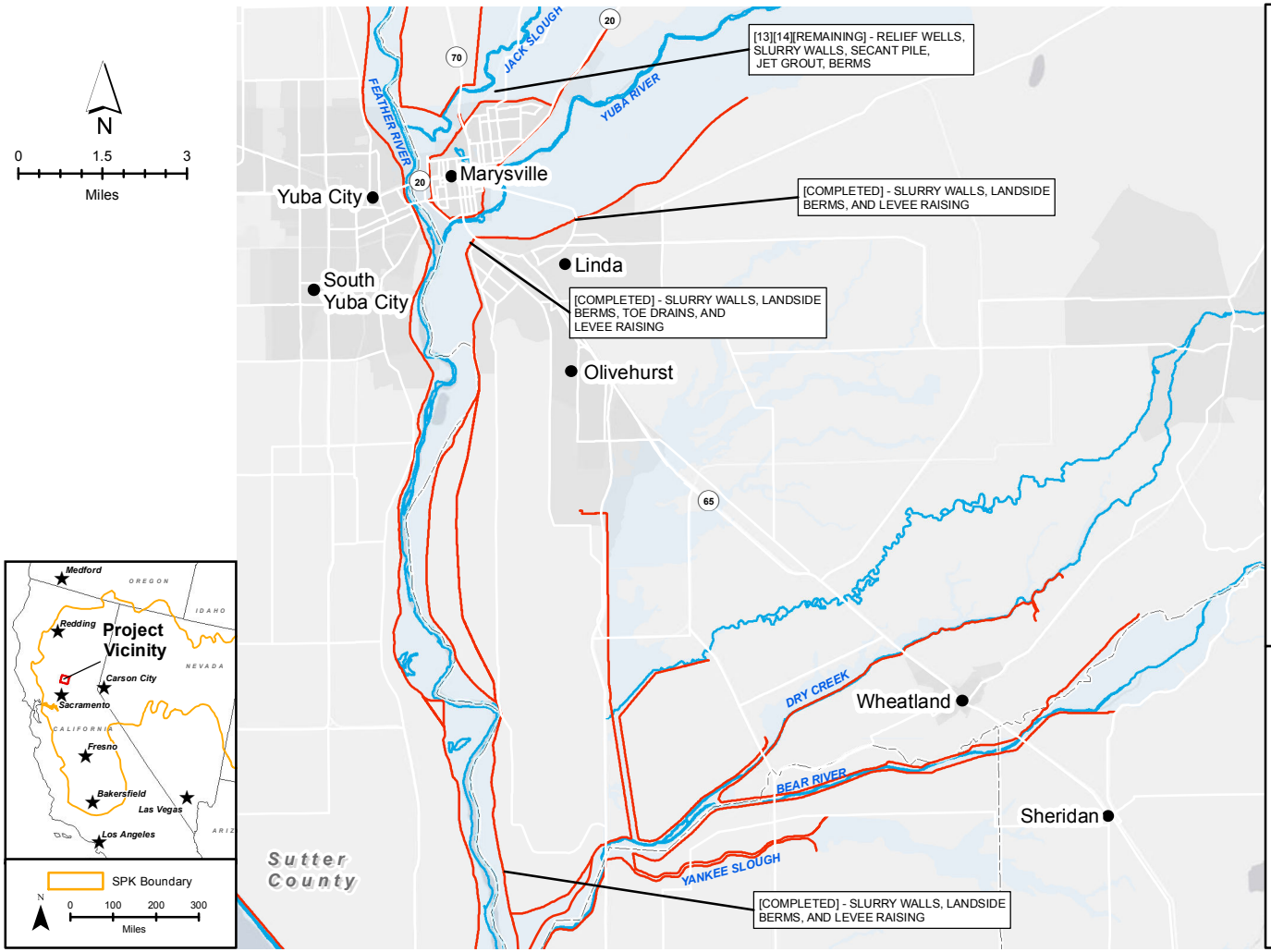
Reach 3. Approval to proceed with construction of the Marysville Ring Levee (MRL) Separable Element was given by the SPD Commander, February 12, 2008. All MRL design and cost changes have been reported and economic benefits updated in the Engineering Documentation Report (EDR) dated April 12, 2010 and the Economic Reevaluation Report dated August 2011. An EA was completed and resulted in a FONSI signed in April 2010. The benefit cost ratio for the Marysville Ring Levee as reported in the Economic Reevaluation Report (ERR) dated August 2011 is 2.3 to 1 at 4 1/8%. The benefit cost ratio at 7% is 1.7 to 1.

The ERR for the MRL was approved by Division on October 31, 2011. The flood rate and depth based on a levee failure during a 60-year event could reach 10 feet in 4 hours. The risk to life stems from extreme cold water. In 49 degree water, a person reaches unconsciousness in 30 to 60 minutes with an expected
OTHER INFORMATION (Continued)

time of survival of 1 to 3 hours. American Recovery and Reinvestment Act funding of $13,491,494 is being used for the first phase construction of the Marysville Ring Levee separable element of the Yuba River Basin Project.

Reaches 1 and 2. The project sponsors have constructed improvements to strengthen the existing levees in Reach 1 and Reach 2 and have requested credit to be applied towards the non-Federal cost of construction of the Marysville element of the authorized Yuba River Basin project. Deeper slurry walls and other measures to control seepage not anticipated during feasibility are required in Reach 1; these design changes appear to be within the Chief's delegated approval authority. However, reauthorization will be required due to scope changes located in Reach 2 and increased costs as a result of under seepage issues identified at initiation of preconstruction engineering and design (PED). A Post Authorization Documentation Report (PADR) dated June 2012 has been submitted to CESPD for approval. The PADR determined continued Federal interest in Reach 1 (Linda-Olivehurst element) of the 1999 authorized project. An Integral Determination Report (IDR) is being prepared to determine if the local construction of improvements to the Reach 1 levees meets the requirements for credit under either Section 104 of WRDA 1986 or Section 3041 of WRDA 3041. Preliminary indications are that the sponsor's improvements to the Reach 1 levees will support the affording of sufficient credit to offset all of the required non-federal additional cash requirement for construction of the Marysville element.

All required modifications to levees in Reach 2 to address under seepage and fragility issues identified at initiation of preconstruction engineering and design (PED) have been rectified by the locals; therefore completion of a General Reevaluation Report recommending a Chief's report for additional authorization is unnecessary, since no Federal construction would be recommended and with approval of the IDR there would be no opportunity for the application of additional credit toward the required cash contribution for the construction of the MRL element of the authorized Yuba River Basin project.



Legend

Levees

Work Status

[Completed] - Work completed as of 30 September 2012

[13] - Work proposed with funds available for FY 2013*

[14] - Work proposed with funds available for FY 2014

[Remaining] - Work required to complete the project after FY 2014

***Includes American Recovery and Reinvestment Act Funds**

Local Protection Projects - Flood Control

Yuba River Basin California

Work Completed, In Progress, and Proposed

U.S. Army Corps of Engineers, South Pacific Division, Sacramento District

1 January 2013

Operation and Maintenance

Key to Abbreviations:

N=Navigation
FRM=Flood Risk Management
RC=Recreation H=Hydropower
EN=Environmental Stewardship
WS=Water Supply

.

Arizona

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Alamo Lake Dam, AZ

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: Located 25 miles North of Wenden, AZ and 120 miles NW of Phoenix, AZ; consists of an earthen filled dam (283-feet-high; 975 feet-long), Outlet Works Spillway Service Roads Reservoir (1,045,300 acre-foot cap spillway crest – 1977) and a Recreation Area.

CONFERENCE AMOUNT FOR FY 2013: $1,621,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $521,000 O: $582,000 T: $1,103,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $997,000 provides for operation and maintenance of dam and appurtenant structures, facilities, and dam operator compounds.

REC: $50,000 provides oversight of out-granted areas located within the Alamo Dam flood control basin.

HYD: N/A

ES: $56,000 provides for ESA consultation with US Fish and Wildlife Service and other agency stakeholders on Alamo Dam and Bill Williams River for 3 listed species (eagle, willow flycatcher, and razorback sucker) and update of the 40 year old project master plan.

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0

2./At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Painted Rock Dam, AZ

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION: Located about 20 miles NW of Gila Bend, AZ and 120 miles SW of Phoenix, AZ; Consists of an earthen-fill dam (181-feet high: 4,780 feet long), Saddle Dike Outlet Works (circular conduit), Spillway (detached), Pilot Channel Reservoir (2,491,493 acre-foot cap spillway crest – 1977), One recreation area (downstream at borrow pit area). The Recreation area has been closed by the State of Arizona due to contaminated water.

CONFERENCE AMOUNT FOR FY 2013: $1,236,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $379,000 O: $528,000 T: $907,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $882,000 provides for operation of the dam, service facilities and grounds, specify reservoir operations, provide hydrographic instrumentation as well as maintenance of the dam and appurtenant structures.

RC: N/A

H: N/A

EN: $25,000 funding provides for coordination with local, State and Federal agencies on degradation of natural resources and listed species (Gila monster) and stewardship of cultural resources.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Whitlow Ranch Dam, AZ

AUTHORIZATION: Flood Control Act of 1946

LOCATION AND DESCRIPTION: Located 50 miles SE of Phoenix, in Pima County, AZ; consists of an earthen-fill dam (25-feet-high; 978-feet-long), Outlet Works (circular conduit) un-gated, Service Roads Reservoir (35,593 acre-foot cap spillway crest - 1976).

CONFERENCE AMOUNT FOR FY 2013: $297,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $232,000 O: $87,000 T: $319,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $296,000 provides for operation and maintenance of the dam and appurtenant structures, grounds, utilities and service facilities as well as hydrographic instrumentation maintenance and monitoring.

RC: N/A

H: N/A

EN: $23,000 provides for coordination with local, State, and Federal agencies and stakeholders on degradation/loss of natural resources and downstream habitat and stewardship of cultural resources.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

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California

O&M Justification Sheet

PROJECT NAME: Black Butte Lake, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on Stony Creek, a tributary of the Sacramento River, about nine miles west of the town of Orland, California in Glenn and Tehama counties. The project comprises an earth fill dam, maximum height of 140 feet, six dikes, and an ungated spillway, creating a reservoir with a gross storage capacity of 160,000 acre-feet. Project was initially placed in operation and became fully operational in 1962.

CONFERENCE AMOUNT FOR FY 2013: $2,259,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $586,000 O: $1,978,000 T: $2,564,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,596,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications. Funding also provides for piezometer remediation.

RC: $809,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, “Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects”.

H: N/A

EN: $159,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: The Black Butte Lake Archeological District is comprised of 52 sites eligible for inclusion in the National Register of Historic Places.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Buchanan Dam, H.V. Eastman Lake, California

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: The project consists of an earthfill dam on the Chowchilla River, about 16 miles northeast of the City of Chowchilla, California, creating a reservoir with gross storage capacity of 150,000-acre-feet for flood control, irrigation, recreation, and other purposes. The project also includes about two miles of channel improvement work and levee construction on Ash and Berenda Sloughs, tributary channels of the river. The project is located in Madera and Mariposa Counties. Initially placed in operation in 1976 and became fully operational in 1982.

CONFERENCE AMOUNT FOR FY 2013: $1,919,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $405,000 O: $1,647,000 T: $2,052,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,145,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, bridge inspection, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: $714,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, “Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects”.

H: N/A

EN: $193,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2./At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

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APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Coyote Valley Dam, Lake Mendocino, California

AUTHORIZATION: Flood Control Act of 1950; Pub. L. No. 81-516, § 204, 64 Stat. 163

LOCATION AND DESCRIPTION: Lake Mendocino is on the Russian River about five miles northeast of Ukiah in Mendocino County. The dam is an earthfill structure 160 feet high, 3,560 feet long, with a 122,500 acre feet capacity. A study to raise the dam is in progress. The original purpose was flood risk management and water supply, but recreation was added after the original authorization. The project also provides environmental outputs.

CONFERENCE AMOUNT FOR FY 2013: $3,624,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $839,000 O: $2,438,000 T: $3,277,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,496,000 Funding provides for routine operation and maintenance for flood risk management; perform water management analysis (control and quality); environmental compliance; and water management of water control data systems. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $1,373,000 Funding provides for routine operation and maintenance for recreation; implementation of law enforcement agreements; real estate management; and environmental compliance.

H: N/A

EN: $372,000 Funding provides for routine operation and maintenance of egg collection facility and fish hatchery to support required environmental mitigation and stewardship; monitoring and management of endangered species; specialized habitat management; ensuring historical, archeological and cultural resources are protected; and compliance with the Biological Opinion on endangered Coho Salmon and threatened Steelhead Trout.

WS: $36,000 Funding provides for routine operation of the service gates and to accomplish operations and maintenance of authorized water supply mission.

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Dry Creek (Warm Springs) Lake and Channel, California

AUTHORIZATION: Flood Control Act of 1962, Pub. L. No. 87-874, § 203, 76 Stat. 1173; Water Resources Control Act of 1974, Pub. L. No. 93-251, § 95 , 88 Stat. 12

LOCATION AND DESCRIPTION: The project is located on Dry Creek, a tributary of the Russian River about 75 miles north of San Francisco, California. It consists of a 319 foot high earth and rockfill dam and reservoir with gross storage capacity of 381,000 acre feet. The primary authorized purposes are flood risk management, recreation and water supply, but also provide environmental outputs.

CONFERENCE AMOUNT FOR FY 2013: $6,697,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $1,021,000 O: $4,130,000 T: $5,151,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,291,000 Funding provides for routine operation and maintenance for flood risk management; perform water management analysis (control and quality); environmental compliance; and water management of water control data systems. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $1,815,000 Funding provides for routine operation and maintenance for recreation; implementation of law enforcement agreements; real estate management; and environmental compliance.

H: N/A

EN: $1,007,000 Funding provides for routine operation and maintenance for congressionally authorized environmental mitigation and stewardship; monitoring and management of endangered species; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: $38,000 Funding provides for routine operation of the service gates and to accomplish operations and maintenance of authorized water supply mission.

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the

remainder of Fiscal Year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Farmington Dam, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on Littlejohn Creek about 3½ miles upstream from Farmington and about 18 miles east of Stockton, and consists of a 56-foot-high earth-fill dam and an ungated saddle spillway, creating a reservoir with a gross storage capacity of 52,000 acre-feet. The project is located in San Joaquin and Stanislaus counties. Project initially placed in operation and became fully operational in 1951.

CONFERENCE AMOUNT FOR FY 2013: $450,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $178,000 O: $312,000 T: $490,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $490,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Hidden Dam, Hensley Lake, California

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: The project consists of a 163 feet-high earth-fill dam on the Fresno River about 15 miles northeast of Madera, with a reservoir with gross storage capacity of 90,500 acre-feet. The project is located in Madera County.

CONFERENCE AMOUNT FOR FY 2013: $2,018,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $381,000 O: $1,686,000 T: $2,067,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,270,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: $729,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, “Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects”.

H: N/A

EN: $68,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

PROJECT NAME: Humboldt Harbor and Bay, California

AUTHORIZATION: River and Harbor Act of 1910, Pub. L. No. 61-264, 36 Stat. 630, 661; River and Harbor Act of 1930, Pub. L. No. 71-520, 46 Stat. 918, 932; River and Harbor Act of 1935, Pub. L. No. 74-409, 49 Stat. 1028, 1038; River and Harbor Act of 1937, 75 P.L. 392, 50 Stat. 844, 849; River and Harbor Act of 1968, Pub. L. No. 90-483, § 101, 82 Stat. 731, 732.

LOCATION AND DESCRIPTION: This project is located at Eureka, California, about 280 miles north of San Francisco. Project operation and maintenance provides for annual inspection and periodic repair of the North and South jetties, and annual maintenance dredging of the Bar and Entrance Channels; the North Bay Channel, the Samoa Channel, including the Turning Basin; the Eureka Channel; and the Fields Landing Channel. The permanently designated Humboldt Open Ocean Disposal Site is utilized for disposal of all dredged materials.

CONFERENCE AMOUNT FOR FY 2013: $1,905,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $2,730,000 O: $0 T: $2,730,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $2,730,000 Funding provides for annual maintenance dredging of the Bar and Entrance Channel by Government Dredge ESSAYONS. Humboldt Harbor is the only Deep Draft harbor in California north of San Francisco. Authorized depth of the Bar and Entrance Channel is -48 feet MLLW.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Storm activity and wave action cause sediment to shoal in the Entrance Channel and create extremely hazardous navigation conditions. Annual dredging of the Harbor entrance is therefore critical to eliminate this hazard as Humboldt is the only deep draft Harbor of Refuge between San Francisco Bay and Coos Bay, Oregon.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Isabella Lake, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The dam is located about 50 miles northeast of Bakersfield, near the confluence of the north and south forks of the Kern River; the auxiliary dam is about ½ mile east of the main dam. Project comprises a 185-foot-high earth fill dam, an ungated concrete spillway, and a 100 foot-high earth fill auxiliary dam, creating a reservoir with a gross storage capacity of 570,000 acre-feet. The project is located in Kern County. Initially placed in operation and became fully operational in 1953.

CONFERENCE AMOUNT FOR FY 2013: $1,080,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $393,000 O: $889,000 T: $1,282,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,157,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: N/A

H: N/A

EN: $125,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS) in particular for the Southwest Willow Flycather and implementing control measures for the Cow Bird; monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS and Level One inventories.

WS: N/A

OTHER INFORMATION: Isabella Lake is considered a DSAC I rated dam due to seismic issues and seepage problems. The project is currently not fully able to provide the benefits for which it was designed and constructed. A Dam Safety Modification Study was conducted and the Record of Decision (ROD) signed in December 2012.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Los Angeles County Drainage Area (LACDA), CA

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: Project consists of the following:

a. HANSEN DAM: Located 4 miles E of the city of San Fernando
Project Elements: Dam and Appurtenances (97- feet-high; 10,475-feet-long; 51,000-acre-feet cap at spillway crest-1983), 1 Recreation Area (number of visitors to Recreation Area in FY2010: 2,000,000), Initially Operational/ Fully Operational FY1940/FY 1949,

b. LOPEZ DAM: Located 2.2 miles NE of the city of San Fernando, California.
Project Elements: Dam and Appurtenances (50 feet-high; 1,330-feet-long; 1,248-acre-feet cap at spillway crest-1979), Initially Operational/ Fully Operational: FY1954/FY1955.

c. SANTA FE DAM: Located 15 miles NE of the City of Los Angeles.
Project elements: Dam and Appurtenances (92 feet-high; 23,800 feet-long;32,109 acre-feet cap at spillway crest 1983), 1 Recreation Area (number of visitors to Recreation Area in FY2010: 446,360), Initially & Fully Operational: Y1949/FY1949.

d. SEPULVEDA DAM: Located 25 miles NW of the City of Los Angeles.
Project elements: Dam & Appurtenances (57 feet-high; 15,444 ft-long;17,425 acre-ft cap at spillway crest 1982), 1 Recreation Area (number of visitors to Recreation Area in FY 2010: 3,080,000), Initially Operational/Fully Operational: FY1949/FY1949.

e. WHITTIER NARROWS DAM: Located 10 miles E of the City of Los Angeles.
Project elements: Dam and Appurtenances (56 feet-high; 19,960 ft-long; 49,143 acre-feet cap at spillway crest 1982), 1 Recreation Area (number of visitors to Recreation Area in FY 2010: 2,043,561), Initially Operational/Fully Operational FY1957/FY1957

f. LOS ANGELES COUNTY DRAINAGE AREA CHANNELS: Consists of 517 miles of channel, of which 38 miles are maintained by the Corps with the remainder maintained by Los Angeles County Department of Public Works.

CONFERENCE AMOUNT FOR FY 2013: $5,053,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $3,276,000 O: $3,164,000 T: $6,440,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $6,171,000 provides for operation and maintenance of 6 flood risk management projects, including dams and appurtenant structures, flood control channels, service facilities and grounds, utilities, permanent operating equipment, reservoir operations, water control management, asset management, and dam safety.

RC: $120,000 provides for oversight of out-granted areas in LACDA basins and management of watersheds.

H: N/A

EN: $149,000 provides for coordination with local, State, and Federal agencies and stakeholders on the listed species (Santa Ana sucker, vireo, flycatcher, gnatcatcher) and degradation/loss of natural resources; invasive plant control, sediment management and stewardship of cultural resources.

WS: N/A

OTHER INFORMATION: None

1 / Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Los Angeles – Long Beach Harbors, CA

AUTHORIZATION: River and Harbor Act of 1871 (amended WRDA 1976)

LOCATION AND DESCRIPTION: The project is located in the cities of Los Angeles and Long Beach, consisting of maintaining the breakwaters and performing maintenance dredging within the harbors to include the Los Angeles River Estuary.

CONFERENCE AMOUNT FOR FY 2013: $265,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $4,809,000 O: $0 T: $4,809,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $ 4,809,000 provides for maintenance maintenance dredging in the Federal channels within the Los Angeles-Long Beach Harbors. The harbors support two major ports in the country, Port of Los Angeles and Port of Long Beach, are 1st and 2nd busiest container ports in the US. Funds will also be used to perform sediment testing and engineering and design. Authorized project depths in the various channels range from -35 to -78 feet MLLW.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Merced County Streams, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project consists of the following flood control improvements:

1) Five flood retention dams:
   Mariposa, 88-feet-high (15,000-acre-feet), 18 miles east of Merced.
   Owens 75-feet-high (3,600-acre-feet), 16 miles east of Merced.
   Bear, 92-feet-high (7,700-acre-feet), 16 miles east of Merced.
   Burns, 53-feet-high (7,000-acre-feet), 13 miles NE of Merced.
   Castle, 40-feet-high (6,400-acre-feet), 6 miles NW of Merced.
2) Black Rascal and Owens Diversion Canals; and
3) Channel improvements on various streams in the vicinity of Merced.

No recreation facilities are included in the project. The project is located in Mariposa County. Initially placed in operation in 1948 and became fully operational in 1954.

CONFERENCE AMOUNT FOR FY 2013: $350,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $166,000 O: $234,000 T: $400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $400,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, limited repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data System modifications.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Mojave River Dam, CA

AUTHORIZATION: Flood Control Act of 1960

LOCATION AND DESCRIPTION: Project is located 100 miles East of Los Angeles in San Bernardino County, California; consists of an earthenfill dam (106 feet-high; 1,250 feet-long), Service and Spillway Roads, Outlet Works, earthenfill Saddle Dike, Reservoir (89,669 acre-feet cap spillway crest–1975), 1 Recreation Area–Temporarily closed in FY 2001 for renovations (number of Visitors to Recreation Area in FY 2000 – 8,400).

CONFERENCE AMOUNT FOR PY 2013: $331,000 2/

BUDGETED AMOUNT FOR FY 2014: **M**: $150,000 **O**: $203,000 **T**: $353,000

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $268,000 provides for operation of dam, buildings, grounds, utilities, and service facilities as well as maintainance of the dam, including appurtenant structures.

RC: $44,000 provides oversight of out-granted areas.

H: N/A

EN: $41,000 funding provides for preparation environmental documentation and consultation with US Fish and Wildlife Service for effects on natural resources in O&M areas (which include 2 endangered species) to prevent immediate degradation or loss as well as updating of the project Master Plan.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Morro Bay Harbor, CA

AUTHORIZATION: Rivers and Harbors Act of 1945

LOCATION AND DESCRIPTION: The Harbor is located half way between Los Angeles and San Francisco in San Luis Obispo County. The project consists of the Breakwater, Entrance Channel, the Main Channel, the Navy Channel, the Morro Channel, and the Sand Trap.

CONFERENCE AMOUNT FOR FY 2013: $2,200,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $2,353,000 O: $0 T: $2,353,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $ 2,353,000 The harbor entrance is in a high wave energy environment and critical routine dredging is required annually to keep the entrance in manageable state for safe navigation. The entrance channel is normally maintained by the Corps' dredge YAQUINA. The harbor is a critical harbor of refuge, and the US Coast Guard also has a station in the harbor.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Annual fish landing tonnage is approximately $4,000,000.

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: New Hogan Lake, California

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: The project is located on the Calaveras River, about 28 miles northeast of Stockton, and comprises a rock-fill dam with an impervious earth core and a maximum height of 200 feet together with four dikes, with a maximum height of 18 feet, and a gated spillway to create a reservoir with a gross storage capacity of 325,000 acre-feet. The project is located in Calaveras County. Initially placed in operation and became operational in 1964.

CONFERENCE AMOUNT FOR FY 2013: $3,971,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $513,000 O: $2,080,000 T: $2,593,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,410,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: $984,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, “Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects”.

H: N/A

EN: $199,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: New Melones Lake (Downstream Channel), California

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Project extends along the Stanislaus River from Goodwin Dam to its confluence with the San Joaquin River. The project provides recreationists' access to the Lower Stanislaus River. The project is located in Calaveras, San Joaquin, Stanislaus, and Tuolumne counties. Initially placed in operation in 1978 and became fully operational in 1988.

CONFERENCE AMOUNT FOR FY 2013: $1,806,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $484,000 O: $1,453,000 T: $1,937,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $445,000 Critical funding needed to perform minimum channel operation and maintenance to prevent failure and maintain integrity of Flood Risk Management; limited inspections and engineering consultations.

RC: $1,129,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, "Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects".

H: N/A

EN: $363,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Oakland Harbor, California

AUTHORIZATION: R & H Act of 1910, Pub. L. No. 60-317, 35 Stat. 815,823 (1909); R & H Act of 1917, Pub. L. No. 64-108, 39 Stat. 391,404 (1916), R & H Act of 1922, Pub. L. 67-362, 42 Stat. 1038, 1040 (1922); R & H Act of 1928, Pub. L. No. 69-560, 44 Stat. 1038, 1040 (1922); R & H Act of 1930 Pub. L. No. 46 Stat. 918, 931 (1930); R & H Act of 1945, Pub. L. No. 79-14, 59 Stat. 10, 13 (1945); R & H Act of 1962, Pub. L. No. 87-874 § 101, 76 Stat. 1173, 1176 (1962); WRDA of 1986, Pub. L. No. 99-662 § 202 (a), 100 Stat. 4082 (1986); WRDA of 1999, Pub. L. No. 106-53 § 101 (a) (7), 113 Stat. 269,275 (1999).

LOCATION AND DESCRIPTION: Oakland Harbor is located in Alameda County, California. The project provides for inspection and maintenance of parallel rubble-mound jetties forming the entrance to Oakland Inner Harbor, and annual maintenance dredging of the Oakland Inner and Outer Harbors to -50 feet Mean Lower Low Water. It also provides for reimbursement to Alameda County for operations and maintenance of the Fruitvale Avenue Railroad Bridge.

CONFERENCE AMOUNT FOR FY 2013: $17,200,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $21,529,000 O: $540,000 T: $22,069,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $22,069,000 Funding provides for annual contract maintenance dredging of the Inner and Outer Harbor Channels; management of the Oakland Inner Harbor Tidal Canal; operation and maintenance of the railroad bridge; environmental clean-up of the Nelson Marine site; and monitoring at the San Francisco Deep Ocean Disposal Site and Sonoma Baylands. The project was recently deepened to -50 feet MLLW.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Placement of dredged material from Oakland has contributed substantially to the Hamilton Wetland Restoration Project. The Port of Oakland is the major container facility in San Francisco Bay and is a National Strategic Port.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Oceanside Harbor, CA

AUTHORIZATION: Rivers and Harbors Act of 1968

LOCATION AND DESCRIPTION: Located in San Diego County, 30 miles North of the City of San Diego. The project provides for maintenance of the general navigation features of the Del Mar Channel (constructed by the U.S. Navy), Oceanside Harbor (constructed by the local interests) and the Entrance Channel. The harbor supports operations of Marine Corps Base Camp Pendleton.

CONFERENCE AMOUNT FOR FY 2013: $1,600,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $1,600,000 O: $0 T: $1,600,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $ 1,600,000 The harbor requires annual dredging to keep the harbor entrance open to support all search and rescue vessels, US Navy vessels, Coast Guard Auxiliary and all local marine vessels. The harbor is also a critical harbor of refuge. Oceanside Harbor has an annual revenue of $3.4 million directly attributed to the commercial fishing industry.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Pine Flat Lake, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: Pine Flat Dam located on the Kings River, about 25 miles east of the city of Fresno, is a straight, gravity-type concrete structure, 429 feet-high, with a gate-controlled spillway in the central section, and creates a reservoir of 1,000,000 acre-feet. The project is located in Fresno County. Initially placed in operation and became operational in 1954.

CONFERENCE AMOUNT FOR FY 2013: $3,218,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $977,000 O: $2,616,000 T: $3,593,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: **$**2,317,000 Funding provides for routine required dam operation and maintenance. Operation includes: execution of gate operation & service, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data System modifications.

RC: $944,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, “Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects”.

H: N/A

EN: $332,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Redwood City Harbor, California

AUTHORIZATION: River & Harbor Act of 1910, 1930, 1935, 1945, 1950

LOCATION AND DESCRIPTION: Redwood City Harbor is on San Francisco Bay in San Mateo County. The project consists of San Bruno Shoal Channel, an entrance channel, outer channel, inner channel, and 2 turning basins. The project is the only deep draft harbor in southern San Francisco Bay.

CONFERENCE AMOUNT FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $2,750,000 O: $0 T: $2,750,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR 2014:

N: $2,750,000 Funding provides for maintenance dredging of the Redwood City Harbor. Authorized project depth is -30 feet MLLW.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Maintenance dredging completed in FY 2010 filled the Bair Island beneficial reuse site, which is owned by Fish and Wildlife, to capacity. Authorization language is required in order to expend Corps of Engineers funds to expand a Fish and Wildlife site. A deepening study is in progress.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Richmond Harbor, California

AUTHORIZATION: Rivers and Harbors Act of 1917, Pub. L. No. 64-108; 39 Stat. 391 (1916); Rivers and Harbors Act of 1930, Pub. L. 71-520; 46 Stat. 520 (1930); Rivers and Harbors Act of 1935, Pub. L. No.74-409; 49 Stat. 1028 (1935); Rivers and Harbors Act of 1938, Pub. L. No. 75-685; 52 Stat. 802 (1938); Rivers and Harbors Act of 1945, Pub. L. No. 79-14; 59 Stat. 10 (1945); Rivers and Harbors Act of 1954, Pub.L. No. 83-870; 68 Stat. 1248 (1954).

LOCATION AND DESCRIPTION: Richmond Harbor is located on San Francisco Bay in Contra Costa County, California. The project includes the Outer and Inner Harbor Channels as well as a training wall.

CONFERENCE AMOUNT FOR FY 2013: $10,700,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $7,000,000 O: $0 T: $7,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $7,000,000 Funding provides for annual maintenance dredging of the Inner Harbor and the Outer Harbor which have authorized project depths of -38 to -45 feet MLLW. The Port of Richmond is the major tanker terminal in San Francisco Bay. Annual commercial tonnage is approximately 25,000,000 tons.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Port of Richmond accounts for over 30% of all commercial tonnage in San Francisco Bay.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Sacramento River (30-Foot Channel), CA

AUTHORIZATION: River and Harbor Act 1946

LOCATION AND DESCRIPTION: The Sacramento Deep Water Ship Channel is the upper 43 miles of an 80 mile deep draft ship channel that connects the Port of West Sacramento with the Pacific Ocean. The Sacramento District maintains the channel to an authorized depth of -30 feet along with 33 miles of dual purpose navigation and flood protection levees. The project is located in the counties of Sacramento, Yolo, and Solano. Operation and Maintenance initiated in 1963.

CONFERENCE AMOUNT FOR FY 2013: $1,443,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $1,500,000 O: $0 T: $1,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

NAV: $1,500,000 Funding provides for minimal project condition survey for public safety, critical routine navigation levee maintenance, required environmental compliance for Corps property along the channel, and maintenance of the ship channel to its authorized depth of -30 feet. Basic levee maintenance will be conducted to provide vehicle access during emergencies. Funding also includes Real Estate compliance inspections and out-grant oversight.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The ship channel is an integral component of the California Bay Delta ecosystem and supports the Port of West Sacramento which is a vital link to California's agriculture industry and a key factor in the economic recovery of the nation. The latest commercial tonnage is 260,000 tons. The only U.S. Coast Guard station in the California Bay Delta is located along this channel.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Sacramento River and Tributaries (Debris Control), California

AUTHORIZATION: River and Harbor Act of 1935

LOCATION AND DESCRIPTION: Englebright and North Fork Dams are both thin wall concrete arch dams constructed by the California Debris Commission to contain mining debris. Englebright is about 20 miles east of Marysville on Yuba River, and North Fork is on the North Fork of the American River about five miles northeast of Auburn. The projects are located in the counties of Nevada and Yuba. Initially placed in operation in 1939 and became fully operational in 1941

CONFERENCE AMOUNT FOR FY 2013: $1,382,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $70,000 O: $1,367,000 T: $1,437,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $600,000 Funding provides for operation of dam and maintenance of all appurtenant structures including monitoring & analysis of instrumentation and data collection, and Real Estate requirements; includes federal, state and local coordination.

FRM: N/A

RC: $673,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, “Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects”.

H: N/A

EN: $164,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS. Funding will minimally support gravel and woody debris augmentation as a result of Endangered Species Act Section 7 consultation with National Marine Fisheries Service and in accordance with ESA final biological opinion. This will be a permanent requirement until the 3 ESA listed species are de-listed.

WS: N/A

OTHER INFORMATION: The Sacramento District was involved in litigation brought by the South Yuba River Citizens League (SYRCL) regarding project impacts to ESA listed species (salmon, steelhead and green sturgeon). As a result of the litigation, the National Marine Fisheries Service (NMFS) was required to issue a new Biological Opinion (BO) in February 2012. The latest BO contains extensive requirements to mitigate for fisheries impacts.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Sacramento River Shallow Draft Channel, California

AUTHORIZATION: River and Harbor Acts, 1899, 1912, 1927, 1935, WRDA 1986

LOCATION AND DESCRIPTION: The project consists of a -10 foot channel, from Suisun Bay to Sacramento, a distance of 60 miles; -6 foot channel between Sacramento and Colusa, 85 miles; -5 foot channel between Colusa and Chico Landing, 50 miles; and such depth as practicable between Chico Landing and Red Bluff, a distance of 53 miles. The reach from Colusa to Red Bluff was deauthorized by WRDA 1986. Project is located in the counties of Colusa, Glenn, Placer, Solano, Tehama, and Yolo.

CONFERENCE AMOUNT FOR FY 2013: $200,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $0 O: $200,000 T: $200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $200,000 Funding for inspections and maintenance of wing dams to ensure snags and other navigation hazards are properly cleared. Maintenance also includes replacement of the wing dam buoys. The Sacramento River is a heavily used waterway by recreational vessels. Failure to remove snags and replace wing dam buoys would result in navigation safety hazards which may result in loss of property or life, if not maintained.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: San Francisco Bay Delta Model Structure, California

AUTHORIZATION: Water Resources Development Act of 1974, Pub. L. No. 93-251, § 103, 88 Stat. 12, 16.

LOCATION AND DESCRIPTION: The San Francisco Bay Delta Model Regional Visitor Center is located in Sausalito, California. The facility is a hydraulic to scale three dimensional model covering one and one half acres.

CONFERENCE AMOUNT FOR FY 2013: $901,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $40,000 O: $824,000 T: $864,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: $864,000 Funding provides annual operation and maintenance of the bay-delta model. The facility currently serves over 150,000 visitors annually, 60% of them school children, fulfilling Corps Strategic Communication goals, providing public and curriculum-based school tours, special events, workshops, and seminars on the Corps's modern missions within the context of the environmental, cultural, and historical issues of the Bay Area.

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Bay Model building also houses the back-up Emergency Operations Center for the South Pacific Division.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: San Francisco Harbor and Bay (Drift Removal), California

AUTHORIZATION: River and Harbor Act of 1945, Pub. L. No. 79-14, § 3, 59 Stat. 10, 23

LOCATION AND DESCRIPTION: Drift Removal is the removal of floating hazards to navigation using Government-owned vessels. The project is based at the San Francisco District Operations Base at Richardson Bay in Sausalito, California. The drift removal fleet's areas of operation are San Francisco Bay (central, north and south), San Pablo Bay, Oakland Estuary, Petaluma River, Napa River, Mare Island Strait, Carquinez Strait, Suisun Bay and Redwood City.

CONFERENCE AMOUNT FOR FY 2013: $3,000,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $3,100,000 O: $0 T: $3,100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $3,100,000 Funding for the removal of floating hazards in navigation channels using Government-owned vessels. The drift removal operation affects the navigational safety concerns for all Bay Area Federal channels used by over 1,000 small ports and several major ports including the ports of Oakland, Richmond, Sacramento, and Stockton.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: San Francisco Bay supports 71,000 annual high speed ferry trips servicing over 2,000,000 commuters, 20,000 boat berths, and 100,000+ shipping industry jobs. The shipping industry contributes over $4.5 billion to the economy.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: San Francisco Harbor, California

AUTHORIZATION: River and Harbor Act 1927, Pub. L. No. 69-560, 44 Stat. 1010, 1014; River and Harbor Act of 1930, Pub. L. No. 71-520, 46 Stat. 918, 934; River and Harbor Act of 1935, Pub. L. No. 74-409, 49 Stat. 1028, 1037

LOCATION AND DESCRIPTION: The project is located approximately five miles west of the Golden Gate Bridge in the waters leading into San Francisco Bay. The San Francisco Main Ship (Bar) Channel is the gateway to San Francisco Bay.

CONFERENCE AMOUNT FOR FY 2013: $2,850,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $3,025,000 O: $0 T: $3,025,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $3,025,000 Funding provides for annual maintenance dredging of the Main Ship (Bar) Channel by Government Dredge ESSAYONS. All commercial deep draft and national defense shipping to San Francisco Bay, Sacramento and Stockton must traverse through this project.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 66 million tons of waterborne commerce traversed the San Francisco Bar entrance channel in the latest year of record. With the completion of the 50 foot channel at the Port of Oakland, the continued maintenance of the 55 foot entrance channel is essential.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

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O&M Justification Sheet

PROJECT NAME: San Joaquin River, Port of Stockton, California

AUTHORIZATION: River and Harbor Act 1876, 1927 & 1950

LOCATION AND DESCRIPTION: The Stockton Deep Water Ship Channel extends 41 miles from the Port of Stockton to Antioch, CA. The Sacramento District is responsible for maintaining both the channel to -35 feet and existing bank protection. The project is located in the counties of Contra Costa, Sacramento and San Joaquin.

CONFERENCE AMOUNT FOR FY 2013: $5,525,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $5,573,000 O: $0 T: $5,573,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $5,573,000 provides for a project condition survey and mandated water quality certification and dissolved oxygen environmental mitigation as well as maintenance of the ship channel to its authorized depth of -35 feet. Funding also includes Real Estate compliance inspections and outgrant oversight.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The ship channel is an integral component of the California Bay Delta ecosystem and supports the Port of Stockton which is the largest inland port and the fourth busiest in California. The Port is a vital link to the agriculture industry of the California's Central Valley. On average 1 cargo vessel passes through the channel every other day transporting millions of tons of waterborne cargo to and from the Port of Stockton taking more than 1 million trucks off area roads annually. The latest commercial tonnage is 5.0 million tons. The Port of Stockton is the largest inland port and the fourth busiest in California. The Port is a vital link to the agricultural industry of the California Central Valley, providing more than 90% of fertilizer used by the regions growers and more than 50% of California's bagged rice to Japan.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: San Pablo Bay Mare Island Strait, California

AUTHORIZATION: River & Harbor Act of 1902, 1911, 1917, 1938, 1945, 1965, 1968 Sec 117

LOCATION AND DESCRIPTION: The San Pablo Bay and Mare Island Strait project is located in Solano County, California and consists of the Mare Island Strait and Pinole Shoal Channels.

CONFERENCE AMOUNT FOR FY 2013: $2,500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $750,000 O: $0 T: $750,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $750,000 Funding provides for annual maintenance dredging of the Pinole Shoal Channel. Authorized project depth is -35 feet. The channel provides access to refineries and the ports of Sacramento and Stockton (San Joaquin River project). Annual commercial tonnage is approximately 17,000,000 tons.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Pinole Shoal Channel provides deep water access to the Suisun Bay Channel and the Ports of Sacramento and Stockton for commercial traffic of foreign and domestic deep draft merchant and oil tanker vessels.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Santa Ana River Basin, CA

AUTHORIZATION: Flood Control Act of 1936 (as amended 1936)

LOCATION AND DESCRIPTION:

a. BREA DAM: Located 2 miles N of the city of Fullerton, California.
Dam and Appurtenances (87-feet-high; 1,765-feet-long; 4,009-acre-feet cap at spillway crest - 1964), 1 Recreation Area (number of visitors to Recreation Area 402,046 in FY 2009), Initially Operational/ Fully Operational FY42/FY42.

b. CARBON CANYON DAM: Located 16 miles NE of the city of Santa Ana, California.
Dam and Appurtenances (99 feet-high; 2,150-feet-long; 6,614-acre-feet cap at spillway crest - 1977), 1 Recreation Area (number of visitors to Recreation Area 94,584 in FY 2009), Initially Operational/ Fully Operational FY61/FY61.

c. FULLERTON DAM: Located 2 miles NE of the City of Fullerton, California
Dam and Appurtenances (46 feet-high; 575 ft-long; 764 acre-feet cap at spillway crest 1969), 1 Recreation Area (number of visitors to Recreation Area 282,031 in FY 2009), Initially Operational/Fully Operational FY41/FY41.

d. PRADO DAM: Located 45 miles E of the City of Los Angeles, California.
Dam and Appurtenances (106 ft-high; 2,280 ft-long; 196,235 acre-ft cap at spillway Crest - 1980), 3 Recreation Areas (number of visitors to Recreation Areas- 3,181,644 in FY 2009), Initially Operational/Fully Operational FY41/FY41.

e. SAN ANTONIO DAM: Located 7 1/2 miles N of the City of Pomona, California.
Dam and Appurtenances (160 ft-high; 3,850 ft-long; 7,703 acre-ft cap at spillway crest 1981), 1 Recreation Area, Initially Operational/Fully Operational FY56/FY56.

f. SAN ANTONIO AND CHINO CREEKS CHANNELS: Located 30 miles E of the City of Los Angeles, California.
15.7 miles of channel, Initially Operational – FY60 Fully Operational – FY61

CONFERENCE AMOUNT FOR FY 2013: $3,988,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $2,026,000 O: $1,839,000 T: $3,865,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $3,611,000 funding provides for operation and maintenance of 5 flood risk management projects including service facilities and grounds, permanent operating equipment, reservoir operations, provide water control data, inspections, asset management, dam safety, hydrographic instruments, and inspections

RC: $129,000 provides for oversight of out-granted areas within the Santa Ana River Basin.

H: N/A

EN: $125,000 provides for consultation and coordination with local, State, and Federal agencies and stakeholders, including on critical habitat for listed species (vireo, flycatchers, Santa Ana sucker) as well as update of the project Master Plan.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Santa Barbara Harbor, California

AUTHORIZATION: Rivers and Harbors Act of 1935, 1945 (amended 1976)

LOCATION AND DESCRIPTION: Located in Santa Barbara County, 90 miles NW of Los Angeles, California; consists of an Entrance and Navigation Channels. The USCGC Blackfin is stationed in the harbor along with a USCG Marine Safety Detachment.

CONFERENCE AMOUNT FOR FY 2013: $2,240,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $2,665,000 O: $0T: $2,665,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $ 2,665,000 provides for maintenance dredging of the project. Authorized project depth is -15 feet in the navigation channel and -20 feet in the entrance channel. The project supports a strategic Coast Guard Station in the area, provides significant navigation service for the region, supports other agencies and is a critical harbor of refuge.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Success Lake, California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on the Tule River, about six miles east of Porterville, and comprises an earth-fill dam with a maximum height of -142 feet with an ungated saddle spillway, and an auxiliary earth-fill dam or dike about -40 feet-high, creating a reservoir gross storage capacity of 85,000 acre-feet. This project is located in Tulare County. Initially placed in operation and became fully operational in 1961.

CONFERENCE AMOUNT FOR FY 2013: $2,328,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $424,000 O: $2,139,000 T: $2,563,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,727,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications. Maintenance funding also includes repair of plates and cleaning and painting of the steel liner on the outlet works downstream from the service gates.

RC: $773,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, “Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects”.

H: N/A

EN: $63,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: Project is currently not fully able to provide the benefits for which it was designed and constructed . A reservoir restriction will limit water storage. A dam safety investigation is currently underway to determine the appropriate remediation efforts.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Suisun Bay Channel, California

AUTHORIZATION: River & Harbor Act of 1927, 1930, 1935, 1960

LOCATION AND DESCRIPTION: The Suisun Bay Channel is 30 miles northeast of San Francisco, California. Project consists of the Main Channel and New York Slough.

CONFERENCE AMOUNT FOR FY 2013: $2,500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $2,026,000 O: $0 T: $2,026,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR 2014:

N: $2,026,000 Funding provides for annual maintenance dredging of the Main Channel. Authorized project depth is -35 feet. All commercial deep draft and national defense shipping to Sacramento and Stockton must traverse through this project.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Provides access to Ports of Sacramento, Stockton, and Concord Naval Weapons Station, which is important for national security.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Terminus Dam (Lake Kaweah), California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project is located on the Kaweah River about 20 miles east of Visalia, and comprises an earth fill dam with a height of 200 feet, with an auxiliary earth fill dam 130 feet-high and fuse gates adjacent to the left abutment of the dam, creating a reservoir with a storage capacity of 185,630 acre-feet. The project is located in Tulare County. Initially placed in operation and became fully operational in 1962.

CONFERENCE AMOUNT FOR FY 2013: $2,069,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $664,000 O: $1,753,000 T: $2,417,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,579,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications. Maintenance funding also includes repair of plates and cleaning and painting of the steel liner on the outlet works downstream from the service gates.

RC: $778,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, “Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects”.

H: N/A

EN: $60,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Division: South Pacific District: Sacramento Terminus Dam (Lake Kaweah), California

O&M Justification Sheet

PROJECT NAME: Ventura Harbor, CA

AUTHORIZATION: Rivers and Harbors Act of 1965

LOCATION AND DESCRIPTION: Located in Ventura County, 65 miles NW of Los Angeles, California; consists of an Entrance Channel, Sand Trap, 4 Jetties , a South Beach Groin and a Detached Breakwater.

CONFERENCE AMOUNT FOR FY 2013: $0 2/

BUDGETED AMOUNT FOR FY 2014: M: $4,071,000 O: $0 T: $4,071,000

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $ 4,071,000 Dredging will establish and provide safe navigation in the Entrance Channel as harbor is subject to severe wave climate. The harbor is homeport for US National Park Service whose fleet services Channel Islands National Park System. The harbor also services the largest squid fishing fleet on the West Coast. Annual revenue from commercial squid fishing is approximately $50,000,000.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Yuba River, California

AUTHORIZATION: River and Harbor Acts of 1896 & 1902

LOCATION AND DESCRIPTION: Project consists of a debris barrier, Daguerre Point Dam, with dikes across overflow channels and protective works (groins) downstream to maintain the Yuba River in its confined channel to the junction with the Feather River at Marysville. Federal responsibility consists of maintaining dikes and protective works to keep the Yuba River in its confined channel. The project is located in Yuba County. Construction on the original project was initiated in November 1902 and was completed in 1935. Various flood channels and some rehabilitation has been accomplished since then with the latest in 1965.

CONFERENCE AMOUNT FOR FY 2013: $121,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $ 0 O: $301,000 T: $301,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $100,000 Funding will be used for operation and maintenance of the dam and all appurtenant structures which includes the debris barrier with dikes across overflow channels and protective works downstream to maintain the Yuba River in its confined channel. Funding also includes monitoring and analysis of instrumentation and data collection and real estate requirements including state and local agency coordination.

FRM: N/A

RC: N/A

H: N/A

EN: $201,000 A jeopardy Biological Opinion was issued in 2012 for the Central Valley spring-run Chinook salmon Ecologically Significant Unit (ESU), Central Valley Steelhead Distinct Population Segment (DPS), and the Southern DPS of North American green sturgeon. Funding provides for partial costs to operate & maintain the fish passage facilities as required by the Reasonable Prudent Alternative (RPAs) and Incidental Take Statement (ITS) terms & conditions and avoid further jeopardizing 2 of the listed species. Funding is required to comply with Endangered Species Act Section 7 terms and conditions and the RPAs.

WS: N/A

OTHER INFORMATION: The Sacramento District was involved in litigation brought by the South Yuba River Citizens League (SYRCL) regarding project impacts to ESA listed species (salmon, steelhead and green sturgeon). As a result of the litigation, the National Marine Fisheries Service (NMFS) was required to issue a new Biological Opinion (BO) in February 2012. The latest BO contains extensive requirements to mitigate for fisheries impacts.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

Colorado

O&M Justification Sheet

PROJECT NAME: John Martin Reservoir, Colorado

AUTHORIZATION: Flood Control Act of 1936 (P.L. 76-868) as Caddoa Reservoir, renamed in 1940.

LOCATION AND DESCRIPTION: John Martin Reservoir is located in Bent County, Colorado about midway between Lamar and Las Animas on the Arkansas River at river mile 1159 approximately 58 miles upstream from the Colorado – Kansas state line. John Martin Reservoir drainage is 18,130 square miles, has a concrete section, an earth section and two earth wing dikes. The overall structure is 2.6 miles long with a maximum height of 120 ft. above streambed and an overflow gated spillway. Total capacity of the reservoir at the top of the flood control is 603,465 acre-feet (259,417 for flood control and 344,048 for conservation and recreation storage). The concrete gravity section is 1,644 ft. and 118 ft. high. The earth section is 2,600 ft long and 130 ft. high. The two wing dams are 3,700 ft. long 20 ft. high on the north and 5,800 ft long and 100 ft high on the south where they tie to the concrete section. Storage capacity at the spillway crest is 232,940 acre feet. There are six outlet conduits in the dam. The spillway is an ogee weir with sixteen sections controlled by tainter gates with a nest crest of 1,024 feet. There are three recreation areas at the project consisting of 2,300 acres that are operated by Colorado Parks and Wildlife through a lease. A visitor center is operated by the Corps. FY 2012 visitation hours were 1,963,892. Project has been in operation since 1943. Accumulated flood and sediment damages prevented by the project since completion are $140,767,000 through FY 2012. Irrigation benefits through FY 2012 are $31,913,000. Irrigation benefit releases for 2012 were 25,812 acre-feet.

CONFERENCE AMOUNT FOR FY 2013: $2,315,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $702,000 O: $1,966,000 T: $2,668,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,331,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $126,000 provides for routine operation and maintenance for recreation and implementation of law enforcement and service contracts.

H: N/A

EN: $211,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species in compliance with the 2001 Biological Opinion for the Piping Plover and the Interior Least Tern; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Trinidad Lake, Colorado

AUTHORIZATION: Flood Control Act of 1958 (P.L. 85-500).

LOCATION AND DESCRIPTION: Trinidad Dam is located in the foothills of the Rocky Mountains on the Purgatoire River and is located 3 miles west off I-5 and the City of Trinidad. Trinidad Dam drainage is 671 square miles. The structure is a rolled earth filled structure 6,610 feet long with a crest width of 24 foot and maximum height of 200 feet above the streambed. The reservoir has two uncontrolled spillways with a 10 foot diameter gated concrete control conduit with a discharge capacity of 5,700 cubic-feet-per-second. The reservoir storage capacity is 123,224 acre feet which include 35,045 acre feet for sediment, 20,000 acre-feet for irrigation, and 17,179 acre feet for recreation. There is a service spillway and two emergency spillways. The spillways are not gated. There are 4 recreation areas at the project consisting of 389 acres. The state of Colorado operates and maintains the recreations areas. The Corps operates a visitor center at the project office. FY 2012 visitation hours were 603,081. The project has been operational since 1977. Accumulated sediment damages prevented by the project since completion are $3,250,000 through FY 2012. Irrigation benefits through FY 2012 are $2,982,000. Irrigation benefit releases for 2012 were 10,186 acre-feet.

CONFERENCE AMOUNT FOR FY 2013: $2,012,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $76,000 O: $1,064,000 T: $1,680,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,542,000 provides for routine operation and maintenance for flood risk management; compliance with Comprehensive Evaluation of Project Datums (CEPD) requirements; access bridge seismic restraint for dam safety and replacement of all damaged embankment piezometers. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $80,000 provides for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: N/A

EN: $58,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: The project is rated a Dam Safety Action Classification (DSAC) II for risk based assessment of dam safety.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

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Nevada

O&M Justification Sheet

PROJECT NAME: Martis Creek Lake, Nevada & California

AUTHORIZATION: Flood Control Act of 1944

LOCATION AND DESCRIPTION: The project consists of a 113 foot-high earth-fill dam on Martis Creek (a tributary of Truckee River), about 32 miles southwest of Reno, creating a reservoir with a gross storage capacity of about 20,000-acre-feet. The project is located in Nevada and Placer counties in California and Washoe County in Nevada. Initially placed in operation and became operational in 1972.

CONFERENCE AMOUNT FOR FY 2013: $1,046,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $285,000 O: $776,000 T: $1,061,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $807,000 Funding provides for routine required dam operation and maintenance. Operation includes: limited execution of gate operation, dam safety and post-earthquake inspections, emergency actions, monitoring instrumentation, data collection, Water Management, Real Estate compliance and out-grant inspections. Maintenance includes: limited critical maintenance, repairs to major equipment, embankment, fire suppression, security system, HVAC, vegetation control, and Water Control Data Systems modifications.

RC: $185,000 Funding provides for routine operation and maintenance for recreation; inspection of recreational facilities; environmental compliance; implementation of law enforcement agreements; real estate management; contract administration; water safety outreach and environmental education; partnerships and collaboration with stakeholders; and enforcement of Title 36, CFR, Chapter 111, Part 327, “Rules and Regulations Governing Public Use of Corps of Engineers Water Resources Development Projects”.

H: N/A

EN: $69,000 Funding provides for routine operation and maintenance for environmental stewardship; monitoring and management of Threatened, Endangered, and Special Status species (TESS); monitoring and management of invasive species; conservation, restoration, and management of natural resources; protection of historical, archeological, and cultural resources; as well as support for GIS and real property inventories.

WS: N/A

OTHER INFORMATION: Project is currently not fully able to provide the benefits for which it was designed and constructed because of seepage problems and seismic concerns. A dam safety investigation is currently underway to determine the appropriate remediation efforts**.**

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Pine & Mathews Dams, NV

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION:

PINE CANYON DAM: Located about 100 miles NE of Las Vegas, NV
Dam (earthfill; 92 feet-high; 884 feet-long), Outlet Works (circular conduit)
Spillway (crest- block), Dike (earthfill), Service Roads, Reservoir (7,747 acre-feet cap spillway crest - 1977)

MATHEWS CANYON DAM: Located about 100 miles NE of Las Vegas, NV
Dam (earthfill; 71 feet-high; 800 feet-long), Outlet Works (circular conduit), Spillway (concrete), Service Roads/Trash Rack, Reservoir (6,271 acre-feet cap spillway crest -1977).

CONFERENCE AMOUNT FOR FY 2013: $354,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $210,000 O: $127,000 T: $337,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $293,000 provides for operation of dam grounds, utilities, service facilities, and hydrographic instrumentation as well as maintenance of the dam and appurtenant structures, relief well testing, maintenance and monitoring.

RC: N/A

H: N/A

EN: $44,000 provides for coordination with local, State, and Federal agencies and stakeholders on the listed species (desert tortoise) and degradation/loss of natural resources and stewardship of cultural resources.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this J-sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

New Mexico

O&M Justification Sheet

PROJECT NAME: Abiquiu Dam, New Mexico

AUTHORIZATION: P.L. 80-858 Flood Control Act of 1948, 1950, 1960
Water Resources Development Act 1986 PL 99-662 is modified by Energy and Water Development appropriation Act 1997 PL 104-206, 30 Sep 1996 for the Emergency Gate Installation

LOCATION AND DESCRIPTION: Abiquiu Dam is located in Rio Arriba County, approximately 6 miles west of the town of Abiquiu, 32 miles upstream from the confluence of the Rio Chama and the Rio Grande and approximately 120 miles north of Albuquerque, New Mexico. Abiquiu Dam drainage is 2,146 square miles, a rolled earth filled structure with a maximum height above streambed of 341 ft. The crest length is 1,800 ft with a top width of 30 ft and a maximum bottom width of 2,000 ft. The reservoir provides 545,784 acre-feet of flood control and sediment storage. Storage capacity at the spillway crest is 1,192,801 acre-feet which includes 43,748 acre-feet for sediment reserve. Concrete outlet works, consist of a 12 ft. dia. 2,260 foot-long tunnel, gates chamber, intake structure, 2 sets of hydraulic operating and emergency gates, and flip bucket. The uncontrolled spillway is in a rock cut located 4,000 ft northeast of the project. A 13.2 MW non-Federal hydroelectric power plant, developed by Los Alamos County, was constructed in FY 1990. A low-flow hydro-turbine came on-line in FY 2011 that provides a 3.0 MW renewable energy credit (REC) to the Abiquiu project. Recreation facilities at the project include day-use picnic shelters, flush and vault restrooms, an overlook structure, visitor center, campground, and two boat ramps. FY 2012 visitation hours were 783,855. The Project has been operational since 1963. Accumulated flood and sediment damages prevented by the project since completion are $567,653,000 through FY 2012.

CONFERENCE AMOUNT FOR FY 2013: $3,258,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $698,000 O: $2,074,000 T: $2,772,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A **H:** N/A **WS:** N/A

FRM: $2,353,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $260,000 provides for routine operation and maintenance for recreation and implementation of law enforcement and service contracts.

EN: $159,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Cochiti Lake, New Mexico

AUTHORIZATION: Flood Control Act of 1960 (P.L. 86-645), Supplemental Authorization PL 88-293 and the 1976 Water Resources Development Act (P.L. 94-587).

LOCATION AND DESCRIPTION: Cochiti Lake is located in Sandoval County, on the Pueblo de Cochiti lands approximately 50 river miles north of Albuquerque, New Mexico. The dam is located at river mile 340 on the Rio Grande. Cochiti Lake drainage is 11,695 square miles, a rolled earth filled structure with a maximum height above streambed of 251 ft. The dam crest length, which includes the spillway crest, is 28,815 ft (5.4 miles), with a top width of 30 ft and a maximum bottom width of 1,760 ft. Storage capacity at the spillway crest is 582,019 acre-feet which includes 78,640 acre-feet for recreation and sediment control. The concrete outlet works consists of a 1,363 foot-long, hydraulic gate controlled, 3-barrel conduit; intake structure; gate chamber; and flip bucket. The spillway is located in the south end of the embankment which is the left abutment of the Santa Fe River. The spillway is a concrete gravity uncontrolled structure with a notched ogee section. Recreation facilities at the project include day-use picnic shelters, flush and vault restrooms, an overlook structure, visitor center, two campgrounds, and two boat ramps. FY 2012 visitation hours were 848,432. The Project has been operational since 1976. Accumulated flood and sediment damages prevented by the project since completion are $541,244,000 through FY 2012.

CONFERENCE AMOUNT FOR FY 2013: $5,256,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $751,000 O: $2,490,000 T: $3,241,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,518,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs. The long-term impacts from sedimentation and debris, caused by upstream fires, on the service life of the project will be analyzed.

RC: $477,000 provides for routine operation and maintenance for recreation and implementation of law enforcement and service contracts.

H: N/A

EN: $246,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species per the 2003 Biological Opinion for the Rio Grande silvery minnow and the Southwest willow flycatcher; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Conchas Lake, New Mexico

AUTHORIZATION: Emergency Relief Act of 1935 (P.L. 74-738), Flood Control Act of 1936 and amended by the Flood Control Act of 1938.

LOCATION AND DESCRIPTION: Conchas Dam and Reservoir is located in San Miguel County, New Mexico on the Canadian River 743 miles upstream from the mount of the Canadian and Arkansas Rivers and approximately 34 miles NW of Tucumcari, New Mexico. Conchas Dam and Reservoir drainage area is 7,409 square miles. The dam consists of a concrete gravity main section with earth dikes on each side having a combined length of about 3.75 miles. The gravity section is 1,250 feet long with a top roadway width of 18 ft. and maximum height of 200 ft above the streambed. The total storage capacity at the spillway crest is 513,900 acre-feet (198,170 acre-feet for flood control; 254,200 acre-feet for water conservation and irrigation; and 61,530 acre-feet dead storage). Outlet works consist of six regulating conduits, intake structure, gate chamber, and stilling basin. The spillway is a concrete gravity uncontrolled structure located in the main dam. The north dike contains a concrete ogee-type emergency spillway. Recreation facilities at the project include two day-use areas with picnic shelters, flush and vault restrooms, overlook structures; visitor center, two campgrounds, and two boat ramps. Two recreation areas are operated by the New Mexico State Parks Division through a lease. The historic Adobe Bell housing complex is located near the Project office and consists of four rentable duplex units and one concessionaire manager's unit. FY 2012 visitation hours were 789,498. The project has been operational since 1939. Accumulated flood and sediment damages prevented by the project since completion are $5,461,000 through FY 2012. Irrigation benefits through FY 2012 are $12,447,000. Irrigation benefit releases for 2012 were 532 acre-feet.

CONFERENCE AMOUNT FOR FY 2013: $2,864,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $301,000 O: $1,842,000 T: $2,143,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,935,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $118,000 provides for routine operation and maintenance for recreation and implementation of law enforcement and service contracts.

H: N/A

EN: $90,000 provides for routine operation and maintenance for environmental stewardship; habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Galisteo Dam, New Mexico

AUTHORIZATION: Flood Control Act of 1960 (P.L. 86-645)

LOCATION AND DESCRIPTION: Galisteo Dam is located in Santa Fe County, approximately 20 miles southwest of Santa Fe, New Mexico on Galisteo Creek 11.8 miles upstream from the confluence of the Rio Grande and approximately 40 miles north of Albuquerque, New Mexico. The Galisteo Dam drainage area is 596 square miles. The dam is a rolled earth filled structure with a maximum height above streambed of 165 ft. The dam crest length is 3,210 ft with a top width of 20 ft. Storage capacity at the spillway crest is 89,468 acre-feet which includes 9,320 acre-feet for sediment reserve. The concrete outlet works consists of a 10 foot diameter ungated 810 foot-long tunnel, and flip bucket. The uncontrolled spillway is a rock cut trapezoidal channel located on the right abutment. Dam safety modifications were completed in 1998 to raise the dam and widen the spillway to the present configuration. Recreation facilities at the project include day-use picnic shelters, a vault restroom, and an overlook structure. FY 2012 visitation hours were 3,378. The Project has been operational since 1970. Accumulated sediment damages prevented by the project since completion are $195,000 through FY 2012.

CONFERENCE AMOUNT FOR FY 2013: $882,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $172,000 O: $650,000 T: $822,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $748,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs. Efforts will be made to continue the control of invasive species, primarily salt cedar, within the upstream basin and on the upstream face of the dam. This on-going eradication efforts will be followed by area restoration with native vegetation.

RC: $50,000 provides for routine operation and maintenance for recreation and implementation of a law enforcement contract.

H: N/A

EN: $24,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species per the 2003 Biological Opinion for the Rio Grande silvery minnow and the Southwest willow flycatcher; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Jemez Canyon Dam, New Mexico

AUTHORIZATION: Flood Control Act of 1948 (P.L. 80-858) and Flood Control Act of 1950 (P.L. 81-516).

LOCATION AND DESCRIPTION: Jemez Canyon Dam is located in Sandoval County, approximately five miles northwest of Bernalillo, New Mexico on the Rio Jemez 2.8 miles upstream from the confluence of the Rio Grande and approximately 35 miles northwest of Albuquerque, New Mexico. Jemez Canyon Dam drainage is 1,034 square miles. The dam is a rolled earth filled structure with a maximum height above streambed of 150 feet. The crest length is 861 feet with a top width of 23 feet. Concrete intake structure 596.6 feet in length with two gravity operated operation and emergency gates with flip bucket. The spillway is a uncontrolled off–channel saddle 400 ft wide. Storage capacity at the spillway crest is 97,425 acre-feet which includes 24,425 acre-feet for sediment reserve. Recreation facilities at the project include a day-use area with picnic shelters, vault restroom, and overlook structure. FY 2012 visitation hours were 21,446. The project has been operational since 1953. Accumulated flood and sediment damages prevented by the project since completion are $25,185,000 through FY 2012.

CONFERENCE AMOUNT FOR FY 2013: $1,299,000 2/

BUDGETed AMOUNT FOR FY 2014: M: $837,000 O: $696,000 T: $1,533,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,444,000 provides for routine operation and maintenance for flood risk management. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $50,000 provides for routine operation and maintenance for recreation and implementation of law enforcement contract.

H: N/A

EN: $39,000 provides for routine operation and maintenance for environmental stewardship; monitoring and management of endangered species per the 2003 Biological Opinion for the Rio Grande silvery minnow and the Southwest willow flycatcher; specialized habitat management; and to ensure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: Funds are being used to continue on-going Endangered Species Act Biological Opinion work to finalize a preferred alternative for the Jemez Sediment Mobilization and Pool Mitigation studies and begin the Environmental Assessment. Work also continues on addressing impacts to the Santa Ana Pueblo's ancestral Tamaya village which has drainage problems attributable to Corps construction of a "ring levee" for high flood storage protection.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Middle Rio Grande Endangered Species Collaborative Program (MRGESCP), New Mexico

AUTHORIZATION: P.L.109-103; 119 Stat. 2256 Section 121 of the Energy and Water Development Appropriations Act, 2006 and as amended by P.L. 110-161 Sec 109 of the Energy and Water Development & Related Agencies Appropriations Act 2008.

LOCATION AND DESCRIPTION: The program is located in the Middle Rio Grande (MRG), NM, from the Colorado border to the headwaters of Elephant Butte and supports the 2003 Biological Opinion (BO) and subsequent BOs. The program is a partnership with 16 signatories organized to protect and improve the status of endangered species along the MRG of New Mexico while simultaneously protecting existing and future regional water uses. Two species of particular concern are the Rio Grande silvery minnow and the Southwestern willow flycatcher. The program provides funding for all participation in committees and work groups, watershed surveys and assessments, or technical studies.

CONFERENCE AMOUNT FOR FY 2013: $2,503,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $0 O: $2,500,000 T: $2,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,500,000 will be applied to fulfill requirements set forth in the 2003 Biological Opinion and subsequent BOs, which provides Endangered Species Act compliance for the U.S. Army Corps of Engineers' Flood Control Operations, and to assist in the execution of the program's Long Term Plan (LTP). Allows continued participation by Corps' biologists, hydrologists, hydraulic engineers and planners to have input into the LTP and to review program studies and reports as authorized by a series of statutory provisions over the past decade. There are several Corps projects approved in the LTP which include ecological studies evaluating habitat use and recruitment of endangered species, MRG Bosque education and outreach, Southwestern willow flycatcher surveying, and continued funding and management of the program's Database Management System (DBMS). This program facilitates Corps compliance under Section 7 of the Endangered Species Act. Identified program goals include alleviating jeopardy, promote recovery to the listed species in the Program area and developing adaptive management tools to support a sustainable Biological Opinion.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Santa Rosa Dam and Lake, New Mexico

AUTHORIZATION: Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: Santa Rosa Dam & Lake is located on the Pecos River at the river mile 766.4 in Guadalupe County approximately 7 miles north of Santa Rosa and 120 miles from Albuquerque, New Mexico. Santa Rosa Dam & Lake drainage is 2,434 square miles. The dam is a rolled earth filled structure with a maximum height above streambed of 212 ft. Storage capacity at the spillway crest is 438,364 acre-feet which includes 82,000 acre-feet for sediment reserve, 200,000 acre-feet for irrigation and 167,000 acre-feet for flood control storage. The dam crest length is 1,950 ft with a top width of 36 ft. The outlet works consists of a 10 ft diameter circular concrete tunnel controlled by two sets of 5x9 ft hydraulic slide gates, intake structure, gate chamber, and flip bucket energy dissipater. The uncontrolled spillway is cut in rock. There are four recreation areas at the project consisting of 509 acres. Three recreation areas are operated by the New Mexico Park and Recreation Division. The fourth recreation area is a Corps project overlook and visitor center. FY 2012 visitation hours were 309,373. The Project has been operational since 1980. Accumulated flood and sediment damages prevented by the project since completion are $5,804,000 through FY 2012. Irrigation benefits through FY 2012 are $5,405,000. Irrigation benefit releases for 2012 were 18,358 acre-feet.

CONFERENCE AMOUNT FOR FY 2013: $1,519,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $228,000 O: $1,052,000 T: $1,280,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

FRM: $1,084,000 provides for routine operation and maintenance for flood risk management; compliance with Comprehensive Evaluation of Project Datums (CEPD) requirements; and access bridge seismic restraint for dam safety. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $71,000 provides for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: N/A

EN: $125,000 provides for routine operation and maintenance of environmental stewardship; monitoring and management of endangered species in compliance with the 2006 Biological Opinion for the Pecos Bluntnose Shiner and the threatened Arkanasas River Shiner; specialized habitat management; and to insure historical, archeological and cultural resoruces are protected.

OTHER INFORMATION: The project is rated as DSAC II for risk based assessment of dam safety and has an identified environmental liability caused by mercury in the reservoir sediments.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

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O&M Justification Sheet

PROJECT NAME: Two Rivers Dam, New Mexico

AUTHORIZATION: Flood Control Act of 1954 (P.L. 83-780)

LOCATION AND DESCRIPTION: Two Rivers Dam is located in Chavez County, New Mexico, 14 miles southwest of the city of Roswell and 2,300 miles from Albuquerque, New Mexico. Two Rivers Dam drainage area is 1,027 square miles. The project consists of two dams, one on the Rio Hondo and the other on the Rocky Arroyo, both tributaries of the Pecos River. Diamond "A" Dam on the Rio Hondo and Rocky Dam on the Rocky Arroyo are both earth fill. Diamond "A" is 4,885 feet long and 98 feet high with a concrete gated outlet structure. Rocky Dam is 2,940 feet-long and 118 feet-high with an uncontrolled outlet. Capacity at Two Rivers Reservoirs at the spillway crest is 163,775 acre-feet of which 18,000 acre feet are provided for sediment reserve. Recreation facilities at the project include picnic shelters and an overlook structure. FY 2012 visitation hours were 191. The project has been operational since 1963. Accumulated flood and sediment damages prevented by the project since completion are $214,579,000 through FY 2012.

CONFERENCE AMOUNT FOR FY 2013: $916,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $210,000 O: $525,000 T: $735,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $674,000 provides for routine operation and maintenance for flood risk management; compliance with Comprehensive Evaluation of Project Datums (CEPD) requirements; and access bridge seismic restraint for dam safety. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life, environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $44,000 provides for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: N/A

EN: $17,000 provides for routine operation and maintenance of environmental stewardship; monitoring and management of endangered species; specialized habitat management;and to insure historical, archeological and cultural resources are protected.

WS: N/A

OTHER INFORMATION: There is an on-going issue with the City of Roswell to have the city recover and maintain sufficient floodwater evacuation enabling channel capacity on the Rio Hondo and Rocky Arroyo below Two Rivers Dams.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

O&M Justification Sheet

PROJECT NAME: Upper Rio Grande Water Operations Model (URGWOM), New Mexico

AUTHORIZATION: Flood Control Act of 1944, Section 7 (P.L. 78-534)

LOCATION AND DESCRIPTION: Rio Grande System (RGR) Hydrologic Unit Code (HUC) Region 13 – Sub regions 1301 – 1309. The Upper Rio Grande Water Operations Model (URGWOM) assists water managers in flood control operations, water accounting, and evaluation of water operations alternatives. URGWOM is a key tool used to provide the community of water managers and water users with a transparent, consistent, and common set of data to formulate, evaluate, and support water management decisions. The operations model performs multi-contractor accounting and forecasting to simulate daily storage and delivery operations. The Corps and several participating agencies coordinated with the public, Native American tribes, and other basin interests to formulate draft alternative operations that are within existing authorities. Evaluation of system operation alternatives and further consultation and coordination are ongoing. The ongoing operation will continue to recommend system operations and provide guidelines for water operators' decisions.

CONFERENCE AMOUNT FOR FY 2013: $1,580,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $0 O: $1,438,000 T: $1,438,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,438,000 provides planning, forecasting and daily water operations modeling for the Upper Rio Grande watershed RGR, HUC Region 13, Sub regions 1301 - 1309. URGWOM is also a tool used for the evaluation of water operations alternatives, as well as evaluation of water management alternatives for Biological Assessments and Opinions.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: URGWOM is an important tool for completing long-term planning studies to evaluate impacts of changes to the system or proposed actions analyzed as potential solutions for addressing the water needs in the basin and is a critical component used by the Corps and other Federal Agencies to develop operational scenarios for Endangered Species Act (ESA) Compliance.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of Fiscal Year 2013.

SOUTHWESTERN DIVISION

1 May 2013

SOUTHWESTERN DIVISION
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INVESTIGATIONS

TEXAS

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocations Prior to FY2011 $	Allocations in FY2011 $	Allocations in FY2012 $	Allocations in FY2013 $	Budgeted Amount in FY2014 $	Additional to Complete After FY2014 $
Brazos Island Harbor, Brownsville Channel, TX (Completion)	5,252,000	2,802,000	614,000 3/	725,000	726,000 2/	385,000 1/	0

Galveston District

The Brazos Island Harbor project provides deep draft access from the Gulf of Mexico through a jettied entrance channel to Brownsville, a side channel, authorized to 36 feet, and shallow draft Fishing Boat Harbor near Port Isabel. The project is 22.8 miles in length. The authorized depths are 42 feet for the main channel and 44 feet through the jetties outer bar. The port's survival is based on the ship channel, which is no longer sufficiently wide or deep for many of today's plus-sized cargo vessels. Increased port traffic is a direct result of the North American Free Trade Agreement (NAFTA) as a majority of the increased traffic meets industrial needs in Mexico. The Port of Brownsville is the only U.S. deep draft port available to the industry along the U.S. – Mexico border to accommodate the need. Port activities include offshore rig construction, ship repair and dismantling, steel fabrication, rail car rehabilitation, liquid petroleum gas storage/distribution, chemical and miscellaneous liquid, steel products and ore minerals offloading, and grain handling and storage. In addition to traditional vessel traffic, there is a need for increased channel dimensions in order to serve offshore oil rigs presently operating in the U.S. Gulf Coast. The study is analyzing problems and opportunities to determine if any channel improvements are needed. To date, the study has researched various depths of 45-52 feet and widths up to 400 feet. The Preliminary Plan is to deepen the channel to a depth of 48-50 feet and a width of approximately 350 feet. The Port of Brownsville has been the nation's second largest in-transit harbor by volume. From 1992 to 2010, total short tonnage in the port increased from 1,829,000 tons to nearly 5,000,000 tons with an estimated value of $3,100,000,000. Foreign imports, primarily in-transit cargo, have been the primary driver for growth, while domestic movements remain relatively constant. In 2008, the foreign trade increased 30.3 percent from the previous year. In 2010, 55 percent of inbound cargo was in-transit to Mexico. Iron ore, iron, and steel products, and other metal ores and products dominate the inbound foreign cargo. The Laguna Madre, a pristine aquatic and marine life habitat is located within the study area. The area also serves as a feeding and breeding area for colonial and migratory birds. Concerns include the detrimental impacts to existing habitat and possibility for enhancement of existing habitat. Several habitats previously subject to tidal inundation have been impacted such that no tidal flow is present. The study is evaluating opportunities to return tidal flow to these areas. Approximately 6,500 acres of tidal marsh and brush habitat associated with the feeding, breeding and wintering of colonial and migratory water birds were destroyed in the mid-20th century due to loss of tidal connection by surrounding development. Storm Surge has been modeled to address any potential Risks associated with major flooding events to the surrounding environmentally sensitive areas and a Sensitivity Analysis for Relative Sea-Level Rise.

In anticipation of project construction, authorization was received in the Fiscal Year 2003 Consolidation Appropriations Act to credit work proposed to be accomplished by the Port of Brownsville for restoration of the Bahia Grande as wetland areas for mitigation against the non-Federal costs of deepening the channel, if it is determined to be integral to the project. The proposal would achieve improved flow and enhanced circulation associated with a wider and deeper channel. This would be especially beneficial with respect to tidal flow and circulation patterns for protected rookery island, and in San Martin Lake. The benefits of deepening would improve channel transportation efficiency including increase in size of ships utilizing the port thus increasing the average annual short tonnage by

approximately 30 percent. The widening of the channel would allow for larger oil rigs to utilize the channel for construction or repair vessels. The non-Federal Sponsor is the Port of Brownsville.

Fiscal Year 2013 funds are being used to complete the Draft Feasibility Report. The funds requested for Fiscal Year 2014 will be used to prepare the final Feasibility Report. The Total Estimated Study Cost slightly increased from $9,869,000 to $10,087,000 due to additional economic studies required to validate the recommended plan. The preliminary estimated cost of the overall feasibility phase is $9,670,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. In addition, the Independent External Peer Review (IEPR) will be an estimated cost of $270,000 and will be 100% Federal funded, which is an exception to the 50-50 cost share. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$10,087,000
Reconnaissance Phase (Federal)	147,000
Feasibility Phase (Federal)	4,835,000
Feasibility Phase (non-Federal)	4,835,000
Feasibility IEPR (Federal)	270,000

The study is authorized by Resolution of the House Committee on Public Works Committee, May 5, 1966, and Section 113 of the Consolidated Appropriations Resolution, 2003 (P.L. 108-7).

The reconnaissance phase was completed in June 2006. The Feasibility Cost Share Agreement (FCSA) was executed in June 2006. The feasibility study is scheduled for completion in FY 2014.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the FY 2014 from prior appropriations for use on this study effort is $146,000. This amount, together with the Budget Amount shown above, will be used to perform work on the FY2014 study as follows: To complete the feasibility phase of the study and issuance of the Chief’s Report.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ $1,385.00 rescinded from the project in 2011.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocations Prior to FY2011 $	Allocation in FY2011 $	Allocation in FY2012 $	Allocation in FY2013 $	Budgeted Amount in FY2014 $	Additional to Complete After FY2014 $
Coastal Texas Protection and Restoration, TX (New Start)	100,000	0	0	0	0	100,000 1/	0

Galveston District

The study area consists of the entire Texas Gulf Coast from the mouth of the Sabine River to the mouth of the Rio Grande. The entire area is at risk for hurricane and flood damage. The study area includes Gulf and tidal waters, barrier islands, marshes, coastal wetlands, rivers and streams and adjacent areas that make up the interrelated coastal area of Texas. The Texas coastal zone contains several large cities at risk during storm events including the nation's 4th largest city (Houston). The coastal region is home to approximately 6,100,000 people, or 25 percent of the State's population. Mineral production has a value of nearly $1,000,000,000 per year and commercial fisheries generate another $156,000,000. Agriculture in the less populated counties generates approximately $500,000,000 of product per year. The study area includes critical coastal ecosystems of 3,900,000,000 acres of wetlands, 235,000 acres of sea grass, 367 miles of sea turtle nesting habitat, 380,000 acres of piping plover critical habitat, and 328 square miles of whooping crane critical habitat, as well as 21 state and Federal wildlife refuges. Of the 367 miles of shoreline, more than 60 percent has been identified by the Texas General Land Office (GLO) as subject to high rates of erosion. Flooding from hurricanes and other rainfall events makes the 25 percent of the state population that live within the 18 coastal county area vulnerable to impact from storms. The ten tropical storms and hurricanes that struck Texas in the last decade resulted in 176 fatalities and over $36,000,000,000 in damages. According to the Federal Emergency Management Agency (FEMA), Hurricane Ike in 2008 was the third most destructive hurricane ever to hit the United States, with losses of more than $27,000,000,000, and responsible for 112 deaths. Rice University estimates that if Hurricane Ike had hit the coast 30 miles further south, the storm surge would have been between 20-25 feet in the Houston Ship Channel (home to one fourth of the United States oil refineries) and would have caused damages exceeding $100,000,000,000. The US Coast Guard estimates that a one month closure of a major port like Houston (the Nation's second busiest port) would cost the national economy $60,000,000,000. Infrastructure is inadequate to evacuate the 1,000,000 residents in hurricane evacuation zones today, and 500,000 more are expected to move into these zones by 2035. Forty percent of the nation's petrochemical industry, 25 percent of national petroleum-refining capacity, 8 deep draft ports (4 of the 10 largest US seaports), 750 miles of shallow draft channels (including 400 miles of the Gulf Intracoastal Waterway (GIWW)), and critical transportation infrastructure will continue to be at risk without a comprehensive plan to restore and maintain a robust coastal ecosystem aimed at reducing storm damage to industries and businesses critical to the nation's economy and protecting the health and safety of Texas coastal communities.

Studies to identify feasible options along the upper Texas coast from the Sabine River to Brazoria County are ongoing under the Sabine Pass to Galveston Bay feasibility study. Under this ongoing study, a six county, state-authorized district (the Gulf Coast Community Protection and Restoration District) has been established to assess opportunities to provide flood risk management and to provide restoration, protection of marshes, national seashores and wildlife refuges, and state wildlife management areas.

Coastal Texas Protection and Restoration, TX (Continued)

The study will develop a comprehensive coastal Protection and restoration plan to reduce risk and damages to public safety, property, and environmental resources from storms and erosion. The goal of the study will be to identify critical data needs and recommend a comprehensive strategy for reducing flood risk through structural and nonstructural measures that take advantage of natural features like barrier islands and storm surge storage in wetlands. The strategy will incorporate integrated plans for ecosystem restoration and flood damage reduction, coast-wide beach and dune ecosystem restoration, and comprehensive barrier island restoration. Alternatives to be considered will include improvements to existing systems (such as existing hurricane protection projects at Port Arthur, Texas City, Freeport, and Lynchburg and seawalls at Galveston, Palacios, Corpus Christi, North and South Padre Island), and the creation of new structural protection plans for hurricane storm damage reduction. This comprehensive study will include assessment of structural, nonstructural and environmental project elements, including hurricane and flood damage reduction, salt water intrusion, shoreline erosion, fish and wildlife protection and ecosystem restoration measures. Comprehensive coastal ecosystem opportunities include: 1) reducing the susceptibility of residential, commercial and public structures and infrastructure to storm-related damages; 2) assisting the recovery and long-term sustainability of coastal ecosystems that support important fish and wildlife resources and buffers storm impacts; 3) restoring barrier island and headland dune ridges that protect vast marsh systems and serve as protection for the nationally critical petrochemical refining industry and navigation infrastructure, including the Gulf Intracoastal Waterway; 4) assisting in recovery of infrastructure damaged by erosion and supporting programs that promote long-term erosion reduction during future storm events; and 5) creating opportunities for the collaboration of local, state and Federal agencies to maximize the use of resources in support of the comprehensive Coastal Protection and Restoration Plan. The State of Texas, acting through the General Land Office, has indicated their intent to share equally in the costs of feasibility studies that may follow the Reconnaissance Phase. The Reconnaissance Phase is scheduled to be completed in FY 2014.

The study is authorized by Section 4091 of the Water Resource Development Act of 2007.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the FY 2014 from prior appropriations for use on this study effort is $0. This amount, together with the Budget Amount shown above, will be used to perform work on the study as follows: N/A.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budget Amount in FY 2014 $	Additional to Complete After FY 2014 $
Dallas Floodway, Dallas, TX (Completion)	9,935,000	1,345,000	4,490,000	2,550,000	700,000 2/	850,000 1/	0

Fort Worth District

The study area is located adjacent to the Stemmons business corridor and the central business district in metropolitan Dallas, Dallas County, Texas. The existing floodway extends along the Trinity River upstream from the abandoned Atchison, Topeka and Santa Fe (AT&SF) railroad bridge at river mile 497.37, to the confluence of the West and Elm Forks at river mile 505.50, then upstream along the West Fork for approximately 2.2 miles and upstream along the Elm Fork approximately four miles. Of the 22.6 miles of levees within this project, the East Levee is 11.7 miles in length and the West Levee is 10.9 miles in length. In addition to the existing levees, the floodway includes a modified channel within the existing reach and structures including six pumping plants, five pressure conduits, and seven drainage structures. The original Dallas Floodway levees and interior drainage improvements were completed between 1928 and 1931 by the city of Dallas and the Dallas County Levee Improvement District. The Trinity River was rerouted by constructing a channel within the levied floodway. The original channel was either filled or used for sump storage. In the mid 1940's, major floods compounded by continued upstream urbanization in the watershed overflowed the floodway system and resulted in severe flooding. Subsequently, several Corps of Engineers improvements to the Dallas Floodway were completed in 1959. The improvements included reinforcing and raising the levees to provide conveyance of the Standard Project Flood (SPF) within the floodway, plus four feet of freeboard. To improve interior drainage, additional pump stations were constructed and the channel within the floodway was further excavated to an average depth of 25 feet with a 50-foot bottom width, to provide the design capacity of 13,000 cubic feet per second (cfs). The existing Dallas Floodway project removed approximately 10,500 acres from the floodplain, most of which is now highly developed industrial property. Major floods occurred in 1989, 1990, and 2007 in the Dallas Floodway. The existing Federal levee system prevented approximately $250 million in damages during the June 2007 flood event. Recent studies of the existing floodway levees within the project reach showed the authorized level of protection to be less than the original SPF plus 4-feet of freeboard level of protection, due to changed hydrologic conditions resulting from increased upstream development. The feasibility study includes a comprehensive assessment of all actions proposed within the Dallas Floodway. The sponsor is the City of Dallas.

The City of Dallas' master plan for future development on the Trinity River, entitled the Trinity River Corridor Project, includes flood risk management, recreation, ecosystem restoration, and transportation features. Section 5141 of the Water Resources Development Act of 2007 (Public Law 110-114) authorized construction of the flood risk management, recreation and ecosystem restoration features of the City of Dallas' comprehensive plan at a total project cost of $459,000,000 with an estimated Federal share of $298,000,000 and an estimated non-Federal share of $161,000,000. On-going studies related to the Trinity River Corridor Project involve coordination with multiple Federal (Federal Highways Administration and Federal Emergency Management Agency), State (Texas Department of Transportation), and local agencies. The Corps of Engineers and the City of Dallas have worked collaboratively with other stakeholders to develop an action plan,

which includes a comprehensive, system-wide assessment of the City of Dallas' measures to remediate deficiencies in the existing levee system, and to determine the technical soundness and environmental acceptability for implementing elements of the City of Dallas' comprehensive plan, while ensuring the integrity of the Dallas Floodway Levee System.

Fiscal Year 2013 funds are being used to complete detailed flood risk management plan evaluations, comparisons, analysis of the system-wide comprehensive plan, and completion of the draft feasibility report. The results of the Risk Assessment (RA) methodology reduced overall feasibility study costs by $18,980,000 from the amount previously presented (FY 2013). The estimated cost of the feasibility study is $19,370,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. In addition, the Independent External Peer Review (IEPR) will be an estimated cost of $250,000 and will be 100% Federal funded, which is an exception to the 50-50 cost share. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$19,620,000 3/
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	9,685,000
Feasibility Phase (Non-Federal)	9,685,000
Feasibility IEPR (Federal)	250,000

The study is authorized by WRDA 2007, PL 110-114, Section 5141.

The feasibility cost sharing agreement was executed on 5 May 2010. The feasibility study is scheduled for completion in FY 2014.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ Total Estimated Study Costs have been reduced from the estimate presented in FY 2013 ($38,600,000) due to reduced efforts required for formulation of the levee remediation plan.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Project	Total Estimated Federal Cost $	Allocations Prior to FY2011 $	Allocation in FY2011 $	Allocation in FY2012 $	Allocation in FY2013 $	Budgeted Amount in FY2014 $	Additional to Complete After FY2014 $
Freeport Harbor, TX	2,768,000	0	0	0	0	1,200,000 1/	1,568,000

PRECONSTRUCTION ENGINEERING AND DESIGN (PED) ACTIVITIES - NEW PHASE - Navigation Channels & Harbors

Galveston District

The Freeport Harbor project is located immediately south of the city of Freeport in Brazoria County, Texas, on the middle Texas coast and is formed by the improvement of the Brazos River from the mouth about 6 miles upstream to Freeport, Texas. The heavily developed industrial and commercial project area (channel and harbor) is also about 50 miles southwest of the nation's 4th largest city, Houston. The project area currently provides for a 47 feet deep, 400 feet wide entrance channel; 45 feet deep, 400 feet wide main channel with three associated 45 feet deep turning basins; plus the 36 feet deep, 200 feet wide Brazos Harbor channel and associated 36 feet deep Brazos Harbor Turning Basin. The current channel width limits existing traffic to one-way traffic for all vessels and daylight-only operation for larger vessels. Port Freeport was ranked 27th nationally in top deep-draft ports, Waterborne Commerce Statistics data, 2010. It services one of the largest petrochemical complexes on the Gulf coast. Crude oil represents 74 percent of the benefits for the locally preferred plan; containers account for 16 percent of the benefits; petro-chemical products 7 percent, and offshore traffic for 3 percent. The non-Federal Sponsor, Port Freeport is actively pursuing improvements for its petroleum transits and Liquefied Natural Gas (LNG) facility. Without improvements to the channel, navigation safety for LNG ship traffic is at risk. The Feasibility Report was completed in January 2013. The recommended project, estimated to cost $232,100,000 with an estimated Federal cost of $118,400,000 and an estimated non-Federal cost of $113,700,000. It provides deepening of the Outer Bar Channel from the jetties into the Gulf of Mexico to –58 feet Mean Lower Low Water (MLLW); deepening from the end of the jetties in the Gulf of Mexico to the Lower Turning Basin to –56 feet MLLW; deepening the Main Channel from the Lower Turning Basin to Sta. 132+66 (ConocoPhillips dock area, above 1,200-foot Brazos port Turning Basin) to –56 feet mean low tide; deepening of Freeport Harbor from Sta. 132+66 through the Upper Turning Basin to –51 feet MLLW, and deepen the remainder of the Stauffer Channel to -26 feet MLLW. The average annual benefits for this plan amount to $47,646,000, all for navigation, based on the latest economic analysis dated June 2012. The Benefit to Cost Ratio for the Recommended Plan is 1.3 to 1 at 7 percent, and 1.9 at the applicable rate of 4 percent. The economics information is based on the Feasibility Report dated December 2012. A deeper channel will allow larger and deeper draft vessels to call on the Port, while also making Port operations more efficient. The non-Federal sponsor, Port Freeport, understands and is prepared to sign a Design Agreement, and has funds available to finance the Preconstruction Engineering and Design portion of the project. The Design Agreement is scheduled to be executed in FY 2014.

Preconstruction Engineering and Design (PED) will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$ 3,690,000
Initial Federal Share	2,768,000
Initial Non-Federal Share	922,000

Total Estimated Preconstruction Engineering and Design Costs	$3,690,000
Ultimate Federal Share	1,845,000
Ultimate Non-Federal Share	1,845,000

The project is not authorized for construction. The project is not in the Fiscal Year 2013 President's Budget. Fiscal Year 2014 funds will be used to initiate the PED phase of the project to include executing the Design Agreement, initiate design activities, and initiate development of first set of plans and specifications for extending the entrance channel and outer bar to 57 feet, and to improve Placement Areas 8 and 9. The completion date for PED is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the FY 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on PED as follows: N/A.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budget Amount in FY 2014 $	Additional to Complete After FY 2014 $
Guadalupe and San Antonio River Basins, TX (Completion)	6,839,000	4,775,000	793,000	383,000	400,000 2/	488,000 1/	0

Fort Worth District

The Guadalupe and San Antonio River watersheds are located in south-central Texas. The Guadalupe basin has a drainage area of 6,700 square miles, and the San Antonio River basin has a drainage area of 4,180 square miles. Severe flooding occurred within various portions of the Guadalupe and San Antonio River Basins in 1972, 1978 and 1997, when portions of the river basins were declared disaster areas. Major flood events also occurred in 1998, 2000, 2002, 2004 and 2010. The flood event in October 1998 resulted in approximately $800 million in residential, infrastructure and commercial damages and 31 deaths. The July 2002 event had similar damages in excess of $1 billion and nine deaths. The flood event in June 2004 resulted in the loss of three more lives. In June 2010, severe flooding damaged New Braunfels, Texas, and also claimed another life. There is one major Corps of Engineers flood risk management structure, Canyon Dam, on the Guadalupe River upstream of the confluence with the Blanco River. In the last ten years, population has increased by more than 20 percent in the study area, and with it, the potential for flooding associated with increased development concentrated around multiple interstates and state highways in Austin and San Antonio. The Guadalupe and San Antonio River Basins Feasibility Study was initiated to identify risks and opportunities for flood risk management as well as ecosystem restoration and other allied purposes. Interim feasibility studies for Leon Creek, Cibolo Creek, Alamo Heights and Salado Creek were previously conducted. The Leon Creek Interim Feasibility Study focused primarily on flood risk management and secondly on ecosystem restoration. The Leon Creek project, as defined in the Alternative Formulation Briefing documents, consists of a levee, quarry detention, and channel modification. Preliminary formulation indicates that there are three possible buyout areas. The final interim feasibility study in the Guadalupe and San Antonio River Basins study is the Lower Guadalupe River Basin Interim Feasibility Study, whose purpose is to identify, analyze and recommend sustainable flood risk management practices and implementable features to reduce flood risks to life, property and the environment. Participation in the study by state and local entities supports increased collaboration and partnering, innovative financing, and a systems approach to strategic integration of a variety of approaches to manage flood risks.

Fiscal Year 2013 funds are being used to complete the Phase 1 flood risk assessment, evaluate alternatives and recommend possible projects for implementation for the Lower Guadalupe River Basin Interim Feasibility Study; to establish Phase 2 existing and future without project conditions and to identify flood risks within the urban areas for the Lower Guadalupe River Basin Interim Feasibility Study; to initiate and complete the Independent External Peer Review (IEPR) and continue the Leon Creek Interim Feasibility Study. The funds requested in Fiscal Year 2014 would be used to complete the Lower Guadalupe River Basin and Leon Creek Interim Feasibility Studies. The overall feasibility study costs have been reduced $4,474,000 from the amount previously presented (FY 2013) due to not identifying economically justified alternatives on the Cibolo and Salado Creek Interim Feasibility Studies. The estimated cost of the overall feasibility study is $12,078,000, which is being cost shared on a 50-50 percent basis by Federal and non-Federal interests. In addition, the IEPR will be an estimated cost of $250,000 and will be 100% Federally funded, which is an exception to the 50-50 cost share.

Total Estimated Cost for the Feasibility Study	$ 12,878,000
Reconnaissance Phase (Federal)	550,000
Feasibility Phase (Federal)	6,039,000
Feasibility Phase (Non-Federal)	6,039,000
Feasibility IEPR (Federal)	250,000

The study is authorized by House Resolution 2547, March 11, 1998.

The scheduled completion date for the Leon Creek Interim Feasibility Study is FY 2014, which is a nine month delay from the date previously presented (FY 2013) due to additional plan formulation required to identify the recommended plan. The scheduled completion date for the Lower Guadalupe River Basin Interim Feasibility Study is FY 2014.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $ 0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocations Prior to FY2011 $	Allocations in FY2011 $	Allocations in FY2012 $	Allocations in FY2013 $	Budgeted Amount in FY2014 $	Additional to Complete After FY2014 $
Houston Ship Channel, TX (New Start)	100,000	0	0	0	0	100,000 1/	0

Galveston District

The Houston Ship Channel System is comprised of the Houston Ship Channel, Bayport Ship Channel, Barbour Terminal Channel, and Greens Bayou. The Houston Ship Channel (HSC) extends 52 miles from its juncture with Texas City Channel at the entrance to Galveston Bay and terminates at its turning basin in the city of Houston. From channel mile 0 to channel mile 40 (Boggy Bayou), the authorized channel depth is 45 feet, with a bottom width of 530 feet. The remaining channel depth from channel mile 40 (Boggy Bayou) to channel mile 52 (turning basin) varies from 36 feet to 40 feet, with a bottom width of 300 feet. The Bayport Ship Channel extends 4.1 miles from its juncture with the HSC at mile 20.5 and terminates at its turning basin near the community of Shore Acres. The authorized channel depth is 40 feet, with a bottom width of 300. Barbour Terminal Channel extends 1.5 miles east from its juncture with the HSC at mile 26.3 and terminates at its turning basin. The authorized channel depth is 40 feet with a width of 300 feet. Greens Bayou is a shallow draft channel and will not be considered for improvement under this study. The latest improvement to the Houston Ship Channel included deepening of the channel to 45 feet from the Gulf of Mexico up to Boggy Bayou, which was completed in June 2005. The Port of Houston has expressed their concern and need for improvements to the Houston Ship Channel System, specifically: the reach of HSC from Boggy Bayou to Turning Basin due to current vessel traffic having to light load to be able to transit this reach of the channel; the Bayport flare due to safety concerns with making the turn into the Bayport Channel from the HSC; and both Bayport and Barbour Channels due to vessel traffic having to light load to be able to transit these channels. Development along the channel has continued to increase, resulting in more vessel traffic and creating an increased risk of collisions and other incidents between vessels, along with the need to improve efficiencies. This situation is expected to worsen with the increase in Panama vessels utilizing these channels after the Panama Canal Expansion Project opens in 2015. The Port of Houston is the nation’s number one port in terms of foreign waterborne tonnage with an estimated value of $146,000,000 and number two in total US tonnage with an estimated value of $212,000,000 based on fiscal year 2010 Waterborne Commerce data. The major commodities include petroleum, chemicals, and bulk goods. A major challenge in this study, due to the industrial growth in the area, will be the coordination of new environmentally suitable placement areas in conjunction with beneficial use of dredge material. An Initial Appraisal Report of the Channel was completed in September 2011 that documented the Federal interests in investigating options to reduce the costs for transporting goods along the Boggy Bayou to Turning Basin reach of the Houston Ship Channel. The Reconnaissance study will investigate the incremental deepening of the reach from 1-foot to 5-foot depth in addition to any necessary widening to accommodate larger vessels. A major challenge in this study, due to the industrial growth in the area, will be the coordination of new environmentally suitable placement areas in conjunction with beneficial use of dredge material. The Port of Houston Authority is the local sponsor for the existing 40 foot project and has indicated their intent to share equally in the cost of a feasibility study that may result from the reconnaissance phase. The reconnaissance phase is scheduled to be completed in FY 2014.

The study is authorized by Public Law 91-611; Title II – Flood Control Act of 1970, Section 216, dated December 31, 1970.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $0 This amount will be used to perform work on the study as follows: N/A

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2011 $	Allocation in FY 2011 $	Allocation in FY 2012 $	Allocation in FY 2013 $	Budget Amount in FY 2014 $	Additional to Complete After FY 2014 $
Nueces River and Tributaries, TX	5,518,000	2,897,000	499,000	622,000	650,000 2/	650,000 1/	200,000

Fort Worth District

The Nueces River basin, which lies in the southern part of Texas, has an overall length of approximately 235 miles, a maximum width of 115 miles, and a total drainage area of 17,075 square miles. The Nueces River flows in a southeasterly direction and enters Nueces Bay near Corpus Christi, Texas. The watershed includes portions of three major aquifers – the Edwards, Carrizo-Wilcox, and Gulf Coast. Poor land use practices, recent near-record droughts, and conflicting water resource management issues have resulted in significant environmental degradation. Limited freshwater inflows into the Nueces estuary system as a result of construction and operation of two upstream reservoirs have resulted in hyper-saline conditions that have severely diminished the habitat suitability of approximately 20,000 acres of the Nueces Delta. In addition, the lowering of water levels in the Edwards Aquifer due to drought conditions and water pumpage has reduced spring flows from the San Marcos and Comal Springs causing degradation of rare and unique habitats, which threatens the continued existence of seven endangered (E) and one threatened (T) species endemic to these habitats, including Fountain Darter *Etheostoma fonticola (E),* Texas Blind Salamander *Typhlomolge rathbuni (E)*, San Marcos Gambusia *Gambusia georgei (E),* Texas Wild Rice *Zinania texana(E)*, Comal Springs Riffle Beetle *Heterelmis comalensis (E)*, Comal Springs Dryopid Beetle *Stygoparmus comalensis (E),* Peck's Cave Amphipod *Stygobromus pecki (E)*, and San Marcos Salamander *Eurycea nana (T)*. The Edwards Aquifer, the major source of water for the City of San Antonio and Bexar County metropolitan areas, accounts for about 20 percent of the basin and is recognized as having high potential for groundwater recharge. The watershed also crosses many political, jurisdictional, and geographical boundaries and pits groundwater systems management against surface water systems management within the same basin. During a Nueces River basin feasibility study workshop held on 28 June 2011, which was attended by over 50 individuals representing 20 Federal, state and local water and environmental resource agencies, all parties agreed that efforts to model the hydraulics and hydrology and the significant ecosystems of the Nueces watershed are extremely important, not only for the watershed study, but also for the region and Texas' State Water Planning efforts, including development of environmental flow parameters for protection of riverine and bay and estuary aquatic ecosystems. Potential ecosystem restoration study solutions include modification of systems operations of Choke Canyon Reservoir and Lake Corpus Christi as well as augmentation of water supply to allow increased fresh-water to be passed through the system into the Nueces Delta to improve habitat conditions; implementation of invasive phreatophytic vegetation removal and reestablishment with native species to improve the riparian habitat value for migratory and resident wildlife and bird species, to increase in-stream base flows, and to potentially increase water levels in the Edwards Aquifer allowing for increased spring-flow to benefit sensitive spring habitats that support endemic Threatened and Endangered species; grading and structural modifications to existing impediments in the delta to help reestablish historical fresh and salt water marsh elevations; recontouring of altered river/delta bathymetry to help restore wetland and shallow water elevations; and placement of breakwaters to help protect the delta face from erosion losses caused by wave action. The study sponsors are the Nueces River Authority, San Antonio Water System, San Antonio River Authority, Guadalupe-Blanco River Authority and the city of Corpus Christi, Texas.

Fiscal Year 2013 funds will be used to conduct re-scoping and to identify a tentatively selected plan (TSP). The funds requested in Fiscal Year 2014 will be used to develop, analyze and evaluate multi-purpose study alternatives, and prepare the feasibility report with integrated NEPA documentation. After rescoping, the estimated cost of the feasibility phase has been reduced to $10,236,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. In addition, the Independent External Peer Review (IEPR) will be at an estimated cost of $200,000 and will be 100% Federally funded, which is an exception to the 50-50 cost share. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$10,636,000
Reconnaissance Phase – Federal	200,000
Feasibility Phase – Federal	5,118,000
Feasibility Phase – non-Federal	5,118,000
Feasibility IEPR (Federal)	200,000

The study is authorized by Senate Resolution dated 23 June 2004.

The Feasibility Cost Sharing Agreement was signed on 24 September 2004. The completion date for the Nueces River and Tributaries, Texas, feasibility study is TBD.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $ 0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Study	Total Estimated Federal Cost $	Allocations Prior to FY2011 $	Allocation in FY2011 $	Allocation in FY2012 $	Allocation in FY2013 $	Budgeted Amount in FY2014 $	Additional to Complete After FY2014 $
Sabine Pass to Galveston Bay, TX	4,309,000	3,181,000	(246,000) 3/4/	191,000	200,000 2/	400,000 1/	583,000

Galveston District

The study area consists of the upper Texas Gulf Coast including Orange, Jefferson, Chambers, Galveston, Harris, and Brazoria Counties. The study area includes Gulf and bay waters, barrier islands, marshes, coastal wetlands, rivers and streams and adjacent areas that make up the interrelated coastal area. Within this reach of the upper Texas coastal zone lies the major population and economic centers of Houston (nation's fourth largest city and home to the nation's second busiest seaport), Freeport, Beaumont, and Port Arthur. Critical coastal ecosystems including sea turtle nesting habitat, piping plover critical habitat as well as two state and Federal wildlife refuges are within the study area. This reach of the upper Texas coastal zone is at risk from wind and surge damage during storm events. The area has experienced significant shoreline erosion causing the destruction of nationally significant wetlands, loss of land and damage to homes, commercial property, and State Highway 87. On September 13, 2008, Hurricane Ike moved directly over the entire study area with category two storm winds of 110 mph (sustained) and an estimate category four storm surge ranging between 10-15 feet above normal tides. The entire study area was significantly altered both physically and economically. The State, through the Texas General Land Office (GLO) agreed to become the new non-Federal Sponsor and a new Feasibility Cost Sharing Agreement was executed in January 2013. The study is following the new "SMART" Planning methodology and framework developed to facilitate more efficient, effective and consistent delivery of USACE Planning decision documents. This study will develop a comprehensive review of the problems and opportunities related to storm surge impacts for the six county region along the upper Texas Coast, and provide impact and economic justifications for potential projects. Potential measures include both structural and non-structural solution types, such as levees, surge gates, beach replenishment, and buyouts.

Fiscal Year 2013 funds are being used to continue the feasibility phase of the study by completing the scoping and continuing the alternative formulation portions of the study. The funds requested for Fiscal Year 2014 plus any carry-in funds will be used to continue the feasibility phase, which includes completion of the formulation and selection of the tentatively selected plan. The preliminary estimated cost of the overall feasibility phase is $7,828,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. In addition, the Independent External Peer Review (IEPR) will be an estimated cost of $200,000 and will be 100% Federal funded, which is an exception to the 50-50 cost share. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$8,223,000
Reconnaissance Phase (Federal)	195,000
Feasibility Phase (Federal)	3,914,000
Feasibility Phase (non-Federal)	3,914,000
Feasibility IEPR (Federal)	200,000

The study is authorized by the Resolution of the Committee on Environment and Public Works of the United States Senate, June 23, 2004.

A new Feasibility Cost Sharing Agreement for the study was executed in January 2013. The feasibility study schedule for completion is TBD.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this study effort is $138,000. This amount, together with the Budget Amount shown above, will be used to perform work on the FY2014 study as follows: continue plan formulation efforts, conduct the Feasibility Scoping Meeting, complete the Alternative Formulation Briefing, and initiate public coordination of the draft report.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ $46,000 rescinded from the project in FY2011.

4/ $200,000 transferred to the Flood Control and Coastal Emergencies (FCCE) account in FY2011.

CONSTRUCTION

OKLAHOMA

APPROPRIATION TITLE: Construction, General - Dam Safety Assurance.

PROJECT: Canton Lake, OK (Dam Safety) (Continuing)

LOCATION: The project is located on the North Canadian River about 2 miles north of Canton in Blaine County, Oklahoma.

DESCRIPTION: The Dam Safety Assurance Report, approved in 2002, indicated two serious and interrelated hydrologic deficiencies occurred at the existing Canton Lake. The deficiencies included inadequate factors of safety against spillway sliding and uncontrolled embankment overtopping by the Probable Maximum Flood. The recommended plan consists of anchoring the existing spillway to improve sliding stability, relocating Highway 58A, constructing an auxiliary spillway with fuse gates to increase the discharge capacity required during a probable maximum flood event, and placing the excavated material from the spillway excavation at the toe of the earthen dam to resolve the seismic and seepage deficiencies as an additional benefit.

AUTHORIZATION: Flood Control Act of 1938.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Never calculated for this project.

BASIS OF BENEFIT-COST RATIO: Not applicable.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT. OF EST. FED. COST	STATUS (1 Jan 2012)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
				Entire Project	62%	TBD
Estimated Total Appropriation Requirement		$ 209,870,000				
Future Non-Federal Reimbursement	8,027,000					
Estimated Federal Cost (Ultimate)	201,843,000					
Estimated Non-Federal Cost		$8,027,000				
Cash Contributions	8,027,000					
Other Costs	0					
Reimbursements	0					
Purpose 1 Water Supply Contract		$8,027,000				
Total Estimated Project Cost		$209,870,000				
Allocations to 30 September 2010		75,727,000				
Allocation for FY 2011		36,358,000				
Allocation for FY 2012		11,100,000				
Allocation for FY 2013		6,000,000 1/				
Allocations through FY 2013		129,185,000	62%			
Estimated Unobligated Carry-In Funds		0 2/				
Budget Amount for FY 2014		16,300,000	69%			
Programmed Balance to Complete after FY 2014		64,385,000				
Unprogrammed Balance to Complete after FY 2014		0				

PHYSICAL DATA
Dams
- Anchor Stabilization of Existing Spillway Structure
- New Auxiliary Spillway and Channel
- New Auxiliary Spillway Bridge
- Rehabilitate Existing Spillway Bridge

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
2/ Estimated Unobligated "Carry-In" Funding. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Program Year (Fiscal Year 2014) from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A.

PHYSICAL DATA: Canton Lake is located on the North Canadian River at river mile 394.3, about 2 miles north of the town of Canton in Blaine County, Oklahoma. This is a multi-purpose project with flood control, water supply, and irrigation outputs. The project consists of a 15,140 foot long rolled earth-filled embankment with a 640 foot gated concrete spillway that rises to a maximum height of 68 feet. Spillway discharges are controlled by sixteen 40x25 foot tainter gates. At conservation pool the lake covers 7,910 acres. The recommended plan consists of anchoring the existing spillway to improve sliding stability, relocating Highway 58A, constructing an auxiliary spillway with fuse gates to increase the discharge capacity required during a probable maximum flood event, and placing the excavated material from the spillway excavation at the toe of the earthen dam to resolve the seismic and seepage deficiencies as an additional benefit.

JUSTIFICATION: The Dam Safety Assurance Report, approved in 2002, indicated two serious and interrelated hydrologic deficiencies occurred at the existing Canton Lake. The deficiencies included inadequate factors of safety against spillway sliding and uncontrolled embankment overtopping by the Probable Maximum Flood. In 2005 Canton was included in Screening Portfolio Risk Assessment which indicated that Canton was within the top ten percent highest at risk dams with regard to failure by uncontrolled seepage. In 2005 a Seismic Safety Review was conducted which indicated that the embankment could move during a seismic event. The population at risk is 60,000 people with potential economic losses estimated between $1.75 and $2.64 Billion.

FISCAL YEAR 2013: The current budget amount of $6,000,000 is being applied as follows:

Complete Plans and Specifications for phase 2 auxiliary channel contract	900,000
Construction Management weir contract (S&A)	5,100,000
Total	$ 6,000,000

FISCAL YEAR 2014: The budget amount of $16,300,000 will be applied as follows:

Initiate Construction on the Phase 2 Channel Excavation Contract	11,200,000
Construction Management/laboratory for weir contract (S&A)	5,100,000
Total	$16,300,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair Rehabilitation and Replacement Costs
Pay 15 percent of cost assigned to project purposes in accordance with the cost allocation in effect for the project at the time of initial project construction. Water supply storage is 25.5 percent of the joint-use costs.	$ 8,027,000	0
Total Non-Federal Costs	$ 8,027,000	0

The Non-Federal sponsor will reimburse its share of construction costs over a period not to exceed 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: The city of Oklahoma City has 100 percent of the water supply storage under contract. Water supply storage is 25.5 percent of the joint-use costs. In accordance with the water supply agreement, executed in 1991, reimbursement payments will be initiated at the completion of construction, and will be completed within 30 years.

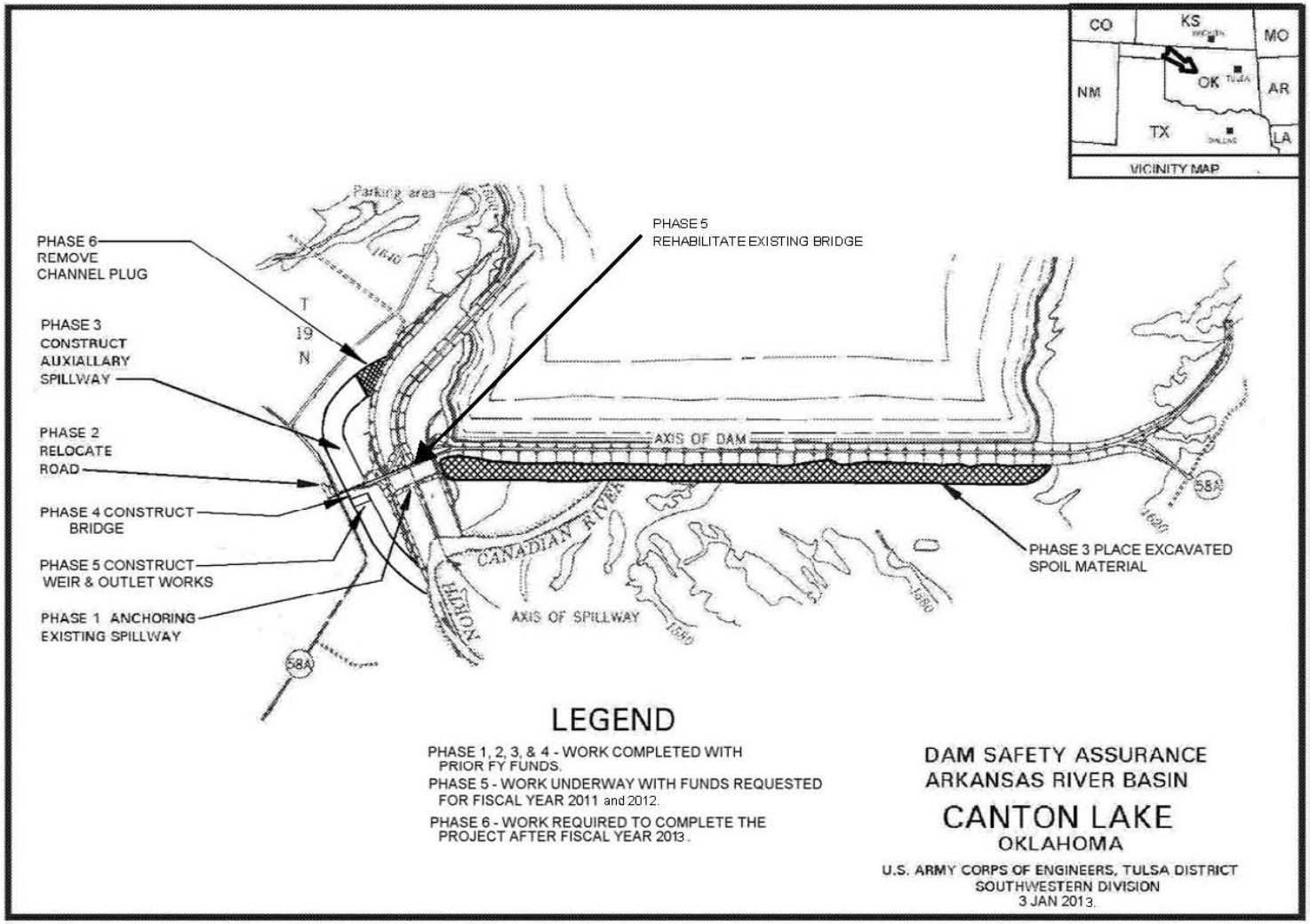
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $209,870,000 is an increase of $37,870,000 from the last estimate of ($172,000,000) presented to Congress (FY 2013). This change includes the following items.

Item	Amount
Post Contract Award and Other Estimating Adjustments (including contingency adjustments) for:	
Weir and Hydraulic Structures	$27,000,000
Phase II Excavation	$10,870,000
Total	$37,870,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Not required. The provisions of Section 404 of the Clean Water Act do not apply because the project improvements do not involve the placement of fill material or the discharge of dredge material in the waters of the United States.

OTHER INFORMATION: A Dam Safety Assurance Program Evaluation Report was approved in March 2002. Construction funds were first appropriated for this project in Fiscal Year 2003. During fiscal year 2006, a seismic and seepage study was performed in addition to the Design Document Report (DDR), which required the relocation of the auxiliary spillway from the Left Abutment to the Right Abutment areas of Canton Dam due to foundation issues.

The award of the Phase 2 Channel Excavation contract was originally scheduled to be awarded in Fiscal Year 2013. The contract was delayed based on the current schedule for completion of the weir and hydraulic structures contract. The Phase 2 Channel Excavation contract will now be awarded in Fiscal Year 2014.



TEXAS

APPROPRIATION TITLE: Construction - Local Protection (Flood & Coastal Storm Damage Reduction)

PROJECT: Brays Bayou, Houston, TX (Continuing)

LOCATION: The project is located in the metropolitan area of Houston, in Harris County, Texas. The Brays Bayou watershed encompasses approximately 128 miles in Harris County. The Brays Bayou channel is approximately 31 miles long and flows into Buffalo Bayou in the Houston Ship Channel below the Turning Basin.

DESCRIPTION: The project consists of 4 detention basins (Sam Houston, Old Westheimer Road, Eldridge Road, and Willow Waterhole); enlargement or modification of 21.1 miles of earthen channel, replacement and / or lengthening of 27 bridges, and recreation features including hike and bike trails, picnic facilities, sports fields, comfort stations, and parking areas.

AUTHORIZATION: Section 101(21) of the Water Resources Development Act (WRDA) of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 2.6 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 2.2 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 2.97 to 1 at 7.625 (FY 1998)

BASIS OF BENEFIT-COST RATIO: Benefits for the total project are from the approved updated economic analysis included in the Brays Bayou Economic Update dated December 2010 with October 2010 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2014)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$ 322,350,000			Entire Project	33%	TBD
Estimated Non-Federal Cost		265,120,000					
Cash Contribution	31,433,000						
Other Costs	233,687,000						
Total Estimated Project Cost		$ 587,470,000					
Allocations to 30 September 2010		$ 94,854,000	1/				
Allocation for 2011		23,237,000					
Allocation for 2012		5,004,000					
Allocation for FY 2013		2,100,000	2/				
Allocations through FY 2013		125,195,000		39%			
Estimated Carry-In Funds		0	3/				
Budget Amount for FY 2014		2,500,000		40%			
Programmed Balance to Complete after FY 2014		194,655,000					
Unprogrammed Balance to Complete after FY 2014		0					

1/ Includes $9,500,000 reprogrammed to the project.
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
3/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into the Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A.

PHYSICAL DATA: The project consists of construction of 21.1 miles of channel improvements, 4 Detention Basins (Sam Houston, Old Westheimer Road, Eldridge Road, and Willow Waterhole), 27 bridge replacements or modifications, and hike and bike trails.

JUSTIFICATION: Brays Bayou drains approximately 137 square miles in the south-central portion of the Buffalo Bayou watershed. About 53,400 homes and businesses are currently subject to flooding by the Standard Project Flood (SPF), and 25,000 of these properties would be subject to flooding by a 100-year frequency flood. On an average annual basis, stream flooding could cause nearly $46,000,000 in damages per year to existing properties. The plan would reduce the existing 100-year frequency floodplain area by about 97 percent and average annual flood damages would be reduced by about 95 percent. The recreational development will partially satisfy existing demand in the area. In June 2001, 6,200 residences were flooded during Tropical Storm Allison, known as the most costly tropical storm in U.S. History. Based on the Life Safety Hazard Indicator for 2012 the population at risk is 722,000 and the level of protection is 100 years. Benefits are based on Brays Bayou Economic Update approved December 2010 at October 2010 price levels at a discounted rate of 7 percent. The average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Prevention	$ 124,944,000
Recreation	1,623,700
Total	$ 126,523,700

FISCAL YEAR 2013: The current amount is being applied as follows:

Final Reimbursement for Discrete Segment #54, Eldridge Detention Basin	$ 354,000
Final Reimbursement for Discrete Segment #84, Willow Waterhole	354,000
Final Reimbursement for Discrete Segment #94	354,000
Initial Reimbursement for Discrete Segment #204, Willow Waterhole Detention Basin	918,000
Federal Oversight	120,000
Total	$ 2,100,000

FISCAL YEAR 2014: The budget amount plus carry-in funds will be applied as follows:

Partial Reimbursement for Discrete Segment #112, Channel Mason Park	$ 280,000
	0
Reimbursement for Federal Share of General Reevaluation Report	2,100,000
Federal Oversight	120,000
Total	$ 2,500,000

NON-FEDERAL COST & REQUIREMENTS: Brays Bayou has been identified as a demonstration project by Section 211(f) of the Water Resources Development Act of 1996 (P.L. 104-303). This Act authorized the non-Federal sponsor to accomplish the work and be subsequently reimbursed for the Federal share of completed discrete segments, in accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged or excavated material disposal areas.	$ 82,038,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	151,649,000	
Pay one-half of the separable costs allocated to recreation and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	3,810,000	$ 357,000
Pay 5 percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to 25 percent as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal sponsor's ability to pay, but no less than 5 percent of the costs allocated to flood risk management and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood risk management features.	27,623,000	683,000
Total Non-Federal Costs	$ 265,120,000	$ 1,040,000

The non-Federal sponsor must also agree to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The sponsor for the flood damage reduction project is the Harris County Flood Control District. The Project Cooperation Agreement (PCA) for the flood control portion of the Upstream (Detention) Component was executed on March 3, 2000, and included the provision of Section 211, WRDA 96. A General Reevaluation Report, dated December 2008, was submitted to the Assistant Secretary of the Army, Civil Works (ASA(CW)), and was approved April 3, 2009 to recombine both the Upstream and Downstream elements of the project into one element. An amendment to the existing PCA was executed on 31 March 2010 to implement the remaining features of the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $322,350,000 is an increase of $6,418,000 from the latest estimate ($315,932,000) presented to Congress (FY 2013). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$ 6,418,000
Total	$ 6,418,000

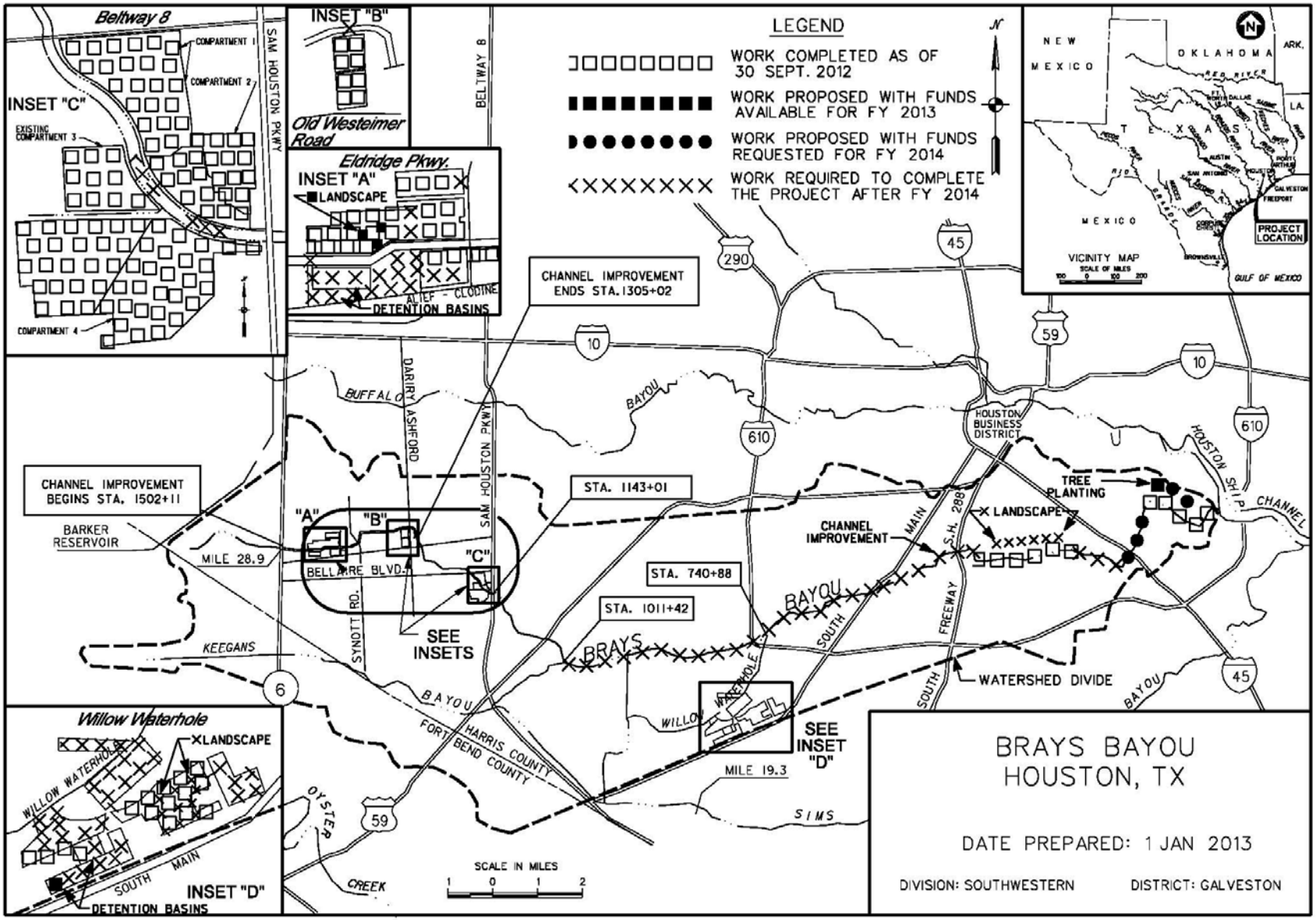
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Final Environmental Impact Statement was filed with the Environmental Protection Agency in September 1988. An Environmental Assessment (EA) for the Detention Component was completed in 1998, with a Finding of No Significant Impact (FONSI) signed on 3 April 1998. An EA for the Alternative to the Diversion Separable Element was completed in 2008 with a FONSI signed on 5 March 2008.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1990, and funds to initiate construction were appropriated in Fiscal Year 1998. The project will reduce the risk of flooding to the Texas Medical Center, which is the largest medical patient care, teaching, and research center in the world. It covers 1,000 acres, 40 buildings located in 100-year floodplain (daily economic loss during flood estimated at $30 million), 6,800 patient beds, 93,500 employees (includes 20,000 physicians, scientists, and researchers), 6 million annual patient visits (18,000 international patient visits), and 160,000 daily visitors. The project will reduce life safety concerns related to Texas Medical Center that include patients life and health in the 14 Texas Medical Center hospitals during major flood events due to staff and physicians not being able to travel through high water (many live in nearby cities and subdivisions in the Brays Bayou watershed), and the inability to transport patients to the hospitals during major flood event due to high water. The project will also reduce the risk of flooding along major traffic commuter routes such as State Highway 288, a major commuter route which is depressed below ground level for much of its length crossing the Brays Bayou watershed. It has filled 3 times with stormwater since it was built. In addition to State Highway 288, the project will reduce the risk of high water causing life safety problems on feeder roads and adjacent roadways along Interstate 45, a hurricane evacuation route through Houston and Harris County. Other areas along Brays Bayou that benefit from the project include the City of Houston; Cities of Bellaire, West University Place, and Southside Place; Rice University; University of Houston; Herman Park and Zoo; Astrodome and Reliant Stadium; and West Loop, Sharpstown, and Westchase commercial areas.

The project was included in the Water Resources Development Act of 1996 (Section 211(f)(6)) as a demonstration project to show advantages and effectiveness of non-Federal interests to undertake planning, design, and construction of Federal Flood Control projects. The Harris County Flood Control District will receive reimbursement upon completion and approval of discrete segments of the authorized project contingent subject to the availability of funds. Each discrete segment's work will be audited prior to reimbursement. Funds being appropriated will be used to reimburse the sponsor and to pay Corps oversight costs.

Harris County experienced a major flooding event on October 15 and 16, 2006. The Harris County Flood Control District reported that completed discrete segments of the Brays Bayou project located upstream of the Sam Houston Tollway stored more than 3,500 acre-feet of water (equivalent to 1.1 billion gallons of water or 2.2 Astrodomes), which reduced residential and commercial flooding within the upper reaches of the watershed. At the time this flood event occurred only 60 percent of the 3 upstream detention basins had been completed. Upon completion of the entire project the detention basins will be constructed to hold 9,975 acre-feet of storm water. As submitted in the annual Flood Damage Report to Congress 2011, flood damages prevented amount to $290,323,000.

The Annual Benefits that were reported in FY 2013 in the amount of $138,575,000 were changed in FY 2014 to $126,523,700. The numbers for FY 2013 were reported incorrectly due to the benefits not being revised to incorporate the approved 2010 economic update numbers.


LEGEND
WORK COMPLETED AS OF 30 SEPT. 2012
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2013
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2014
WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2014
Beltway 8
INSET "C"
COMPARTMENT 1
COMPARTMENT 2
EXISTING COMPARTMENT 3
COMPARTMENT 4
SAM HOUSTON PKWY
INSET "B"
Old Westeimer Road
BELTWAY 8
Eldridge Pkwy.
INSET "A"
LANDSCAPE
ALIEF - CLODINE
DETENTION BASINS
CHANNEL IMPROVEMENT ENDS STA. 1305+02
CHANNEL IMPROVEMENT BEGINS STA. 1502+11
BARKER RESERVOIR
MILE 28.9
BUFFALO BAYOU
DAIRY ASHFORD
SAM HOUSTON PKWY
STA. 1143+01
"A"
"B"
"C"
BELLAIRE BLVD.
SYNOTT RD.
SEE INSETS
KEEGANS
STA. 740+88
STA. 1011+42
BRAYS BAYOU
SOUTH FREEWAY
CHANNEL IMPROVEMENT
MAIN
S.H. 288
TREE PLANTING
LANDSCAPE
HOUSTON BUSINESS DISTRICT
HOUSTON SHIP CHANNEL
WATERSHED DIVIDE
WILLOW WATERHOLE
SEE INSET "D"
MILE 19.3
SIMS
OYSTER CREEK
HARRIS COUNTY
FORT BEND COUNTY
SCALE IN MILES
1 0 1 2
Willow Waterhole
LANDSCAPE
WILLOW WATERHOLE
SOUTH MAIN
INSET "D"
DETENTION BASINS
NEW MEXICO
OKLAHOMA
ARK.
LA.
TEXAS
MEXICO
VICINITY MAP
PROJECT LOCATION
GULF OF MEXICO
BRAYS BAYOU
HOUSTON, TX
DATE PREPARED: 1 JAN 2013
DIVISION: SOUTHWESTERN
DISTRICT: GALVESTON

APPROPRIATION TITLE: Construction – Flood Risk Management

PROJECT: Lower Colorado River Basin (Wharton/Onion), TX (New Start)

LOCATION: The Onion Creek separable element of the project is located in southeast Austin, Texas, and in southern Travis County in central Texas. The Wharton separable element of the project is located in the City of Wharton, Texas, in Wharton County in southeast Texas.

DESCRIPTION: The Onion Creek separable element consists of implementing non-structural flood risk management measures at Timber Creek in Travis County and Onion Creek Forest/Yarrabee Bend in Austin, Texas. The Timber Creek component includes the acquisition and removal of approximately 81 residential structures. The vacated land will be utilized for recreation and ecosystem restoration, with approximately 40 acres of the vacated land converted to a park and 16 acres restored to riparian woodlands. Recreation features include picnic shelters, group shelters, trails, basketball courts, parking, and the infrastructure associated with these facilities. The Onion Creek Forest/Yarrabee Bend component includes the acquisition and removal of approximately 410 residential structures. The vacated land will be utilized for recreation and ecosystem restoration, with approximately 100 acres of the vacated land converted to a park and 190 acres restored to riparian woodlands. Recreational features include picnic shelters, group shelters, trails, equestrian trails, basketball courts, tennis courts, volleyball courts, parking, and the infrastructure associated with these facilities. The Wharton separable element consists of approximately 35,600 feet of levees, 2,300 feet of floodwalls, 7,000 feet of channel modifications, and interior drainage features in the city of Wharton.

AUTHORIZATION: Water Resources Development Act of 2007, Section 1001 (43) and Section 5144.

REMAINING BENEFIT-REMAINING COST RATIO: 1.4 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 5.125 percent.

BASIS OF BENEFIT-COST RATIO: Lower Colorado River Basin Phase I, Texas, Onion Creek Watershed Economic Update of an Authorized Project report dated December 2012.

SUMMARIZED FINANCIAL DATA			ACCUM. PCT OF EST FED COST	STATUS (1 Jan 2013)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		80,005,000		Onion Creek	0	TBD
				Wharton	0	TBD
Estimated Non-Federal Cost		45,127,000				
Cash Contributions	6,271,000			Entire Project	0	TBD
Other Costs	38,856,000					
Total Estimated Project Cost		125,132,000				

Allocations to 30 September 2010	1,722,000	1/	
Allocation for FY 2011	0		
Allocation for FY 2012	1,000	1/ 2/	
Allocation for FY 2013	0		
Allocations through FY 2013	1,723,000		3%
Estimated Carry-In Funds	0		
President's Budget for FY 2014	3,000,000	3/	8%
Programmed Balance to Complete After FY 2014	53,048,000	4/	
Unprogrammed Balance to Complete After FY 2014	22,234,000	5/	

1/ Allocations in FY 2012 and earlier were for preconstruction engineering and design (PED) costs associated with Investigation funds.
2/ The FY12 amount reprogrammed from another project.
3/ FY 2014 Budget Amount is for the Onion Creek separable element.
4/ Programmed balance is for the Onion Creek separable element.
5/ Unprogrammed balance is for the Wharton separable element.

PHYSICAL DATA:
The Onion Creek separable element consists of the Timber Creek and Onion Creek Forest/Yarrabee Bend components. The Timber Creek component of the Onion Creek separable element: Buyout of approximately 81 structures; construction of 40-acre park; and ecosystem restoration of 16 acres. The Onion Creek Forest/Yarrabee Bend component of the Onion Creek separable element: Buyout of 410 residential structures; construction of 100-acre park; and ecosystem restoration of 190 acres. The Wharton separable element: 35,600 feet of levees; 2,300 feet of floodwalls; 7,000 feet of channel improvement; and interior drainage facilities.

JUSTIFICATION: Two major flood events estimated as approximately 40-year events occurred in the Onion Creek watershed in 1998 and 2001, with several hundred homes being inundated and many totally destroyed. These events highlighted the fact that annualized flood damages within the watershed are estimated at over $5 million, based on August 2006 estimates. The Onion Creek project consists of buying out approximately 491 structures, which will reduce annual damages by over $2.9 million and reduce risk to life and property. In addition, the Onion Creek area will benefit from ecosystem restoration adding 63 average habitat units by improving 206 acres of riparian woodlands and from recreational features placed on land vacated as a result of the removal of structures from the highly flood-prone areas. Another area subject to flooding is located along the banks of the Colorado River in the lower part of the basin, in and around Wharton, Texas. This city of 9,000 citizens has been subject to frequent flooding from both the Colorado River as well as from more localized events. Two major flood events estimated as approximately 25-year events have occurred since 1998. The most recent occurred in November 2004 and inundated approximately 150 homes and businesses, causing $8 million in damages. In both recent flood events, a low-income minority neighborhood on the southwest side of Wharton was among the hardest hit. Approximately 4,000 structures are located within the 1% exceedance (100-year) floodplain, and approximately 9,000 residents would need to be evacuated in a 100-year flood event. A structural project has been authorized for the Wharton area which would essentially remove the city from this floodplain and significantly reduce damages and risk to life and property. The structural project is expected to reduce flood damages within the study area by an average of $5.5 million annually. Average annual benefits for the Onion Creek separable element are as follows:

Annual Monetary Benefits	Amount
Flood Risk Management	$ 2,959,000
Recreation	3,475,000
Total	$ 6,434,00

Ecosystem Restoration – net increase of approximately 63 Average Annual Habitat Units

FISCAL YEAR 2013: Not in the President's FY2013 budget.

FISCAL YEAR 2014: The budget amount for the Onion Creek separable element will be applied as follows:

Initiate Buyout of residential structures located in Onion Creek Forest/Yarrabee Bend	$ 2,700,000
Engineering and Design	200,000
Supervision and Administration	100,000
Total	$ 3,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as modified by the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands; easements; rights-of-way; relocation payments and assistance to displaced persons; disposal areas for borrow and excavated or dredged material; and modify or relocate utilities, roads, bridges, and other facilities, where necessary for the construction of the project.	$ 69,516,000	$ 264,000
Pay one-half of the separable costs allocated to recreation (except recreation Navigation) and bear all cost of operation, maintenance, repair, rehabilitation and replacement of recreation facilities. Includes betterments for recreation.	3,660,000	
Pay 35 percent of the costs allocated to fish and wildlife management, and pay 100 percent of the costs of operations, maintenance, repair, rehabilitation, and replacement of fish and wildlife features.	1,576,000	
Cash reimbursement to sponsor sufficient to limit the sponsor's contribution to the maximum amount set by law.	(42,373,000)	
Total Non-Federal Costs	$ 32,379,000	$ 264,000

The non-Federal sponsor will make all required payments concurrently with project construction.

Note: The amounts above are for only the Onion Creek separable element.

STATUS OF LOCAL COOPERATION: The non-Federal sponsors for the Onion Creek separable element are the city of Austin and Travis County, who have each indicated its intention to act as the local sponsor for the project segment within its jurisdictional area and will fund the non-Federal portion of this project. The city of Austin and Travis County will collectively contribute approximately 37 percent of the total project costs, primarily through land, easements, rights-of-way, relocation and disposal areas (LERRD) and cash contributions for construction of the recreation and ecosystem portions of the project. The Project Partnership Agreement (PPA) for the Timber Creek component is scheduled to be executed in FY 2013. The PPA for the Onion Creek Forest/Yarrabee Bend component is scheduled to be executed in July 2013.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimates of $80,005,000 is an increase of $9,846,000 from the latest estimate presented to Congress (FY 2013). This change includes the following item.

Item	Amount
Price Escalation	$9,846,000
Total	$9,846,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: An Environmental Assessment was conducted and a Finding of No Significant Impact (FONSI) was prepared as part of the required documentation for compliance with the National Environmental Policy Act. The FONSI was executed on 10 October 2006.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 2007. For the Onion Creek separable element, Section 5144 of the Water Resources Development Act of 2007 authorized the Secretary to include the costs and benefits associated with the relocation of flood-prone residences in the study area in the period beginning two years before the date of initiation of the feasibility study (the Feasibility Cost Sharing Agreement was executed on 25 May 2000) and ending on the date of execution of the partnership agreement for construction of the project, to the extent the Secretary determines that such relocations are compatible with the authorized project. This section also authorizes the Secretary to afford credit toward the non-Federal share of the project for the cost of relocation of residences that were incurred by the non-Federal interest. A Limited Reevaluation Report (LRR) is being developed to identify the changes to the project, including the removal of the properties acquired by the sponsor with FEMA funds and the addition of the property acquired before the feasibility study began. The LRR is scheduled to be completed in FY 2013. The Wharton separable element consists of constructing 35,600 feet of levees; 2,300 feet of floodwalls; 7,000 feet of channel improvement; and interior drainage facilities. The non-Federal sponsor is the city of Wharton, Texas. The city of Wharton has been subject to frequent flooding from both the Colorado River as well as from more localized events. Two major flood events estimated as approximately 25-year events have occurred since 1998. The most recent occurred in November 2004 and inundated approximately 150 homes and businesses, causing $8 million in damages. In both recent flood events, a low-income minority neighborhood on the southwest side of Wharton was among the hardest hit. Approximately 4,000 structures are located within the 1 percent exceedance (100-year) floodplain. During such an event, approximately 9,000 residents would need to be evacuated. A structural project has been authorized in the Water Resources Act of 2007 for the Wharton area which would essentially remove the city from this floodplain and significantly reduce damages and risk to life and property. Preconstruction engineering and design efforts are proceeding on the Wharton separable element under the Design Agreement executed in July 2007.

The project costs, benefit-cost ratios and benefits have been updated to reflect data in the Lower Colorado River Basin Phase I, Texas, Onion Creek Watershed Economic Update of an Authorized Project report dated December 2012.

ONION CREEK SEPARABLE ELEMENT:

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		56,331,000
Estimated Non-Federal Cost		32,379,000
Cash Contributions	4,450,000	
Other Costs	27,929,000	
Total Estimated Project Cost		88,710,000

REMAINING BENEFIT-REMAINING COST RATIO: 1.1 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.1 to 1 at 7 percent.

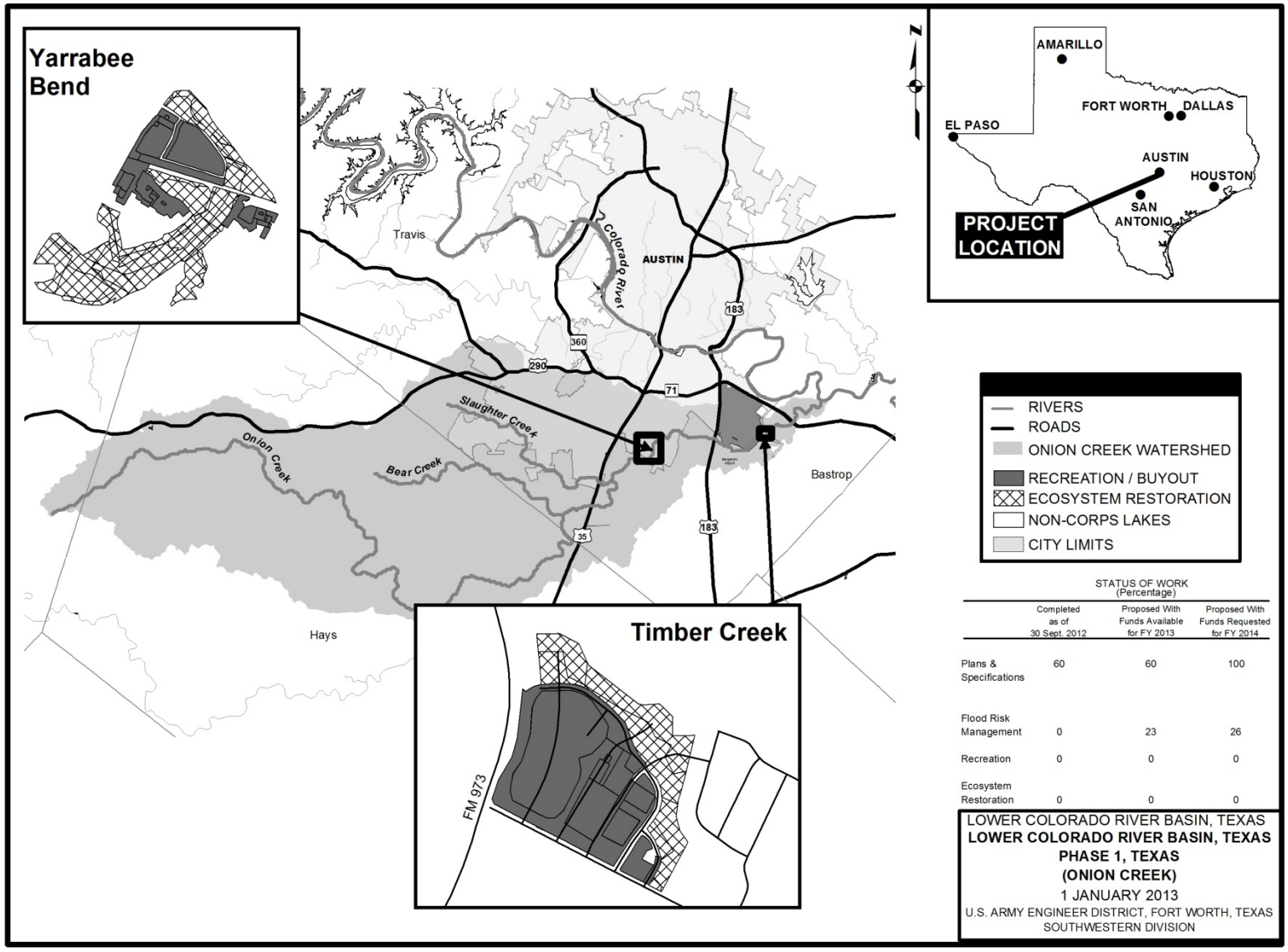
WHARTON SEPARABLE ELEMENT:

SUMMARIZED FINANCIAL DATA

Estimated Federal Cost		23,674,000
Estimated Non-Federal Cost		12,748,000
Cash Contributions	1,821,0000	
Other Costs	10,927,000	
Total Estimated Project Cost		36,422,000

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 7 percent.



STATUS OF WORK (Percentage)

	Completed as of 30 Sept. 2012	Proposed With Funds Available for FY 2013	Proposed With Funds Requested for FY 2014
Plans & Specifications	60	60	100
Flood Risk Management	0	23	26
Recreation	0	0	0
Ecosystem Restoration	0	0	0

LOWER COLORADO RIVER BASIN, TEXAS
LOWER COLORADO RIVER BASIN, TEXAS
PHASE 1, TEXAS
(ONION CREEK)
1 JANUARY 2013
U.S. ARMY ENGINEER DISTRICT, FORT WORTH, TEXAS
SOUTHWESTERN DIVISION

OPERATION AND MAINTENANCE

ARKANSAS

O&M JUSTIFICATION SHEET

PROJECT NAME: Beaver Lake, AR

AUTHORIZATION: Flood Control Act of 1938 and the Water Supply Act of 1958

LOCATION AND DESCRIPTION: The project is located in Benton, Carroll and Washington Counties of Arkansas. Beaver Lake is a multiple-purpose project located in the White River Basin. The project contains two 56,000 kW hydropower generator units.

CONFERENCE AMOUNT FOR FY 2013: $5,929,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $1,953,000 O: $5,234,000 T: $7,187,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,415,000 – Funds will be used for critical routine operation of the dam, reservoir, service facilities and permanent operating equipment; perform inspection of structures and equipment; and maintenance of the tainter gates, sluice gates, overhead crane, and emergency generator. Other non-routine maintenance activities include vegetation removal from Dikes 1 and 3 ($60,000), and replacement of exterior incandescent fixtures and interior fluorescent interior fixtures ($35,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide increased efficiency, and lower future repair costs.

RC: $2,864,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: $2,504,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance by increasing unit availability, thus reducing long-term forced outages, provide for additional revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: $384,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $20,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Beaver Lake has more than $83,236,000 in cumulative flood damages prevented. Over 2,643,000 recreation visits, with a local economic impact of more than $72,623,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Blue Mountain Lake, AR

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: The project is located in Logan and Yell Counties of Arkansas. Blue Mountain Lake is located in the Arkansas River Basin on the Petit Jean River, near Waveland, Arkansas. The primary purpose of the project is flood risk management. The project also offers excellent recreational opportunities.

CONFERENCE AMOUNT FOR FY 2013: $1,864,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $434,000 O: $1,475,000 T: $1,909,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,373,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor gates, hoists, overhead bridge crane and emergency generator ($50,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide increased efficiency, and lower future repair costs.

RC: $399,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: N/A

EN: $129,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $8,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Blue Mountain Lake has more than $42,151,000 in cumulative flood damages prevented. Over 208,000 recreation visits, with a local economic impact of more than $5,831,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bull Shoals Lake, AR

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Bull Shoals Lake is located in Marion, Baxter and Boone Counties of Arkansas and Ozark and Taney Counties of Missouri. Bull Shoals is a multi-purpose project with functional capabilities for hydropower and flood risk management. The project contains eight hydropower generating units with a total installed capacity of 340,000 kW.

CONFERENCE AMOUNT FOR FY 2013: $6,672,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $5,557,000 O: $6,007,000 T: $11,564,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $4,945,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tainter gates, sluice gates, overhead crane, and emergency generator. Non-routine maintenance includes refurbishing and painting 3 of the 17 tainter gates ($2,515,000); and replacement of 30 tons of heating and cooling capacity with new ground source (geothermal) heat pump system, and replacement of exterior incandescent fixtures and fluorescent interior fixtures with high efficiency LED alternatives ($360.000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $1,691,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: $4,491,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. Non-routine maintenance activities include retrofitting exciter controls and associated devices ($923,000). These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages, provide revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: $425,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $12,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Bull Shoals Lake has more than $267,995,000 in cumulative flood damages prevented. Over 3,730,000 recreation visits, with a local economic impact of more than $106,784,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Dardanelle Lock & Dam, AR

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: This project is located in Pope, Logan, Johnson and Yell Counties of Arkansas. Dardanelle Lock and Dam are located on the McClellan-Kerr Arkansas River Navigation System and the project purposes include hydropower and navigation. The project contains four 35,000 kW hydropower generator units.

CONFERENCE AMOUNT FOR FY 2013: $8,912,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $1,438,000 O: $6,312,000 T: $7,750,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $2,289,000 – Funds will be used for critical routine operation and maintenance for navigation required for pool regulation and lock operations. Maintenance activities include channel dredging ($300,000). These funds would improve navigation performance by increasing the availability and reliability of the system and provide for decreased future repair costs due to continual deferred maintenance.

FRM: $250,000 – Funds will be used for critical routine operation and maintenance of pump station, service facilities and permanent operating equipment to meet basic flood risk management mission. These funds would improve flood risk management performance by reducing the risk of failure, provide increased efficiency, and lower future repair costs.

RC: $1,694,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; water management of water control data systems; and operation and maintenance of visitor center.

H: $3,317,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages, provide revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: $192,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $8,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Dardanelle Lock & Dam has more than $45,721,000 in cumulative flood damages prevented. Over 1,288,000 recreation visits, with a local economic impact of more than $39,284,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: DeQueen Lake, AR

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: DeQueen Lake is located on the Rolling Fork River, in Sevier County, approximately four miles northwest of DeQueen, Arkansas. The project's primary purposes are flood risk management, water supply, recreation and environmental stewardship.

CONFERENCE AMOUNT FOR FY 2013: $1,870,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $532,000 O: $1,370,000 T: $1,902,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,434,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor slide gates, hoists, overhead bridge crane, and emergency generator. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $425,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: N/A

EN: $36,000 – Funds will be used for routine operations and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $7,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: DeQueen Lake has more than $15,719,000 in cumulative flood damages prevented. Over 135,000 recreation visits, with a local economic impact of more than $4,484,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Dierks Lake, AR

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: Dierks Lake is located on the Saline River in Howard and Sevier Counties, Dierks, Arkansas. The project's primary purposes are flood risk management, water supply, recreation and environmental stewardship.

CONFERENCE AMOUNT FOR FY 2013: $1,567,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $455,000 O: $1,131,000 T: $1,586,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,088,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor slide gates, hoists, overhead bridge crane, and emergency generator. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $450,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: N/A

EN: $40,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $8,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Dierks Lake has more than $11,344,000 in cumulative flood damages prevented. Over 134,000 recreation visits, with a local economic impact of more than $4,211,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Gillham Lake, AR

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: Gillham Lake is located on the Cossatot River, in Howard County, approximately six miles northeast of Gillham, Arkansas. The project's primary purposes are flood risk management, water supply, recreation and environmental stewardship.

CONFERENCE AMOUNT FOR FY 2013: $1,463,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $700,000 O: $1,034,000 T: $1,734,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,312,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor slide gates, hoists, overhead bridge crane, and emergency generator. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $381,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: N/A

EN: $34,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $7,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Gillham Lake has more than $23,314,000 in cumulative flood damages prevented. Over 93,000 recreation visits, with a local economic impact of more than $2,739,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Greers Ferry Lake, AR

AUTHORIZATION: Flood Control Act of 1938 as amended by the Flood Control Acts of 1941 and 1944

LOCATION AND DESCRIPTION: Greers Ferry Lake is located on the Little Red River in Cleburne and Van Buren Counties, Heber Springs, Arkansas. Greers Ferry is one of the five multiple purpose projects in the White River Basin and was constructed for the generation of hydropower and flood risk management. The project contains two 48,000 kW hydropower generating units.

CONFERENCE AMOUNT FOR FY 2013: $6,444,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $1,671,000 O: $5,734,000 T: $7,405,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,667,000 – Funds will be used for critical routine operation of the dam, reservoir, service facilities and permanent operating equipment; inspection and maintenance of structures, tainter gates, sluice gates, overhead crane, and emergency generator. Non-routine maintenance activities include dewatering stilling basin ($130,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide increased efficiency, and lower future repair costs.

RC: $2,967,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: $2,578,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages, provide revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: $166,000 – Funds will be used for routine operations and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $27,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Greers Ferry Lake has more than $44,014,000 in cumulative flood damages prevented. Over 7,283,000 recreation visits, with a local economic impact of more than $191,114,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: McClellan-Kerr Arkansas River Navigation System, AR

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: The 445-mile long McClellan-Kerr Arkansas River Navigation System consists of 18 locks and dams, providing a 9-foot deep inland navigation channel from the Mississippi River to Catoosa, Oklahoma. The system includes the Arkansas, White and Verdigris Rivers, and the authorized purposes include navigation, environmental stewardship and recreation.

CONFERENCE AMOUNT FOR FY 2013: $24,961,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $14,981,000 O: $13,577,000 T: $28,558,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $23,914,000 – Funds will be used for critical routine operation and maintenance for navigation required for pool regulation and lock operations; critical fleet maintenance support; perform failure diagnostics and repairs; and channel maintenance to include dredging. Non-routine maintenance activities include repair lock wall hole and stilling basin erosion at Ormond ($312,000), update the dredge material management plan ($100,000), channel dredging ($2,400,000), repair lock wall hole and stilling basin erosion at Locks 4 and 7 ($1,500,000), reduce GHG emissions from 10 lock buildings by replacing outdated and inefficient roofs and windows ($400,000), reduce GHG emissions from project office by replacing 16 tons of heating and cooling capacity with new ground source (geothermal) heat pump system ($225,000). These funds would improve navigation performance by increasing the availability and reliability of the system and provide for decreased future repair costs due to continual deferred maintenance.

FRM: N/A

RC: $4,364,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance; and water management of water control data systems.

H: N/A

EN: $280,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: N/A

OTHER INFORMATION: The McClellan-Kerr Arkansas River Navigation System has more than $1,688,055,000 in cumulative flood damages prevented. Over 3,590,000 recreation visits, with a local economic impact of more than $106,378,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Millwood Lake, AR

AUTHORIZATION: Flood Control Act of 1946 as modified by the Flood Control Act of 1958

LOCATION AND DESCRIPTION: Millwood Lake is located on the Little River, approximately seven miles east of Ashdown, Arkansas. The lake was constructed for the primary purpose of flood risk management. The project also offers excellent recreational opportunities.

CONFERENCE AMOUNT FOR FY 2013: $2,680,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $718,000 O: $1,988,000 T: $2,706,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,859,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor slide gates, hoists, overhead bridge crane, and emergency generator. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $717,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: N/A

EN: $122,000 – Funds will be used for routine operations and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $8,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Millwood Lake has more than $24,327,000 in cumulative flood damages prevented. Over 461,000 recreation visits, with a local economic impact of more than $16,311,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Nimrod Lake, AR

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: The project is located in Yell and Perry Counties, Arkansas. Nimrod Lake is located on the Fourche LaFave River, approximately nine miles southeast of Plainview, Arkansas. There are 680 square miles of drainage area above the dam. The primary purpose of the project is flood risk management. The project also offers excellent recreational opportunities.

CONFERENCE AMOUNT FOR FY 2013: $2,020,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $362,000 O: $1,654,000 T: $2,016,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,360,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of 2 Howell-Bunger valves, sluice (slide) gates, hoists, overhead crane, and emergency generator ($48,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, and providing for increased efficiency and lower future repair costs.

RC: $462,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; environmental compliance; and water management of water control data systems.

H: N/A

EN: $184,000 – Funds will be used for routine operations and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $10,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Nimrod Lake has more than $33,480,000 in cumulative flood damages prevented. Over 267,000 recreation visits, with a local economic impact of more than $7,897,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Norfork Lake, AR

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Norfork Lake is located in Baxter County, Arkansas and Ozark County, Missouri. Norfork Lake is one of the five multiple-purpose projects in the White River Basin constructed for flood risk management and the generation of hydropower. The project contains two 40,250 kW hydropower generation units.

CONFERENCE AMOUNT FOR FY 2013: $8,146,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $3,638,000 O: $4,510,000 T: $8,148,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $4,504,000 – Funds will be used for critical routine operation and maintenance for flood risk management; routine maintenance of 12 tainter gates, sluice gates, overhead crane, and emergency generator; and critical routine operation and maintenance for the joint costs associated with the dam, powerplant and project. Non-routine maintenance activities include clean, refurbish, and paint 3 of 12 tainter gates ($2,610,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide for increased efficiency, and lower future repair costs.

RC: $1,261,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance; and water management of water control data systems.

H: $2,143,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages and provide revenue to the Treasury.

EN: $229,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: $11,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Norfork Lake has more than $80,802,000 in cumulative flood damages prevented. Over 1,497,000 recreation visits, with a local economic impact of more than $48,793,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Ozark-Jeta Taylor Lock & Dam, AR

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: This project is located in Franklin, Johnson, and Crawford Counties, Arkansas. Ozark-Jeta Taylor Lock and Dam is located on the McClellan-Kerr Arkansas River Navigation System and the project purposes include recreation, hydropower, and navigation. The project contains five inclined axis 20,000 kW hydropower generator units.

CONFERENCE AMOUNT FOR FY 2013: $5,188,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $1,673,000 O: $4,614,000 T: $6,287,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $2,337,000 – Funds will be used for critical routine operation and maintenance for navigation required for pool regulation and lock operations. Non-routine maintenance activities include channel dredging ($400,000), and repair of lock wall hole and stilling basin erosion ($500,000). These funds would improve navigation performance by increasing the availability and reliability of the system and provide for decreased future repair costs due to continual deferred maintenance.

FRM: N/A

RC: $1,459,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance; and water management of water control data systems.

H: $2,389,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages, provide revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: $102,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: N/A

OTHER INFORMATION: Ozark-Jeta Taylor Lock & Dam has more than $93,336,000 in cumulative flood damages prevented. Over 551,000 recreation visits, with a local economic impact of more than $16,033,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

KANSAS

PROJECT NAME: Council Grove Lake, KS

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION: Council Grove Lake is located on the Grand (Neosho) River at river mile 449.5, 1.5 miles northwest of Council Grove in Morris County, Kansas. This is a multi-purpose project with flood control, water supply, water quality control, and recreation outputs. The project is a 6,500 foot long earth embankment with an uncontrolled spillway. At conservation pool the lake covers 3,259 acres.

CONFERENCE AMOUNT FOR FY 2013: $2,115,000 1/
BUDGET AMOUNT FOR FY 2014: M: $526,000 O: $1,333,000 T: $1,859,000 2/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,218,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $583,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: $48,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1964, Council Grove Lake has more than $175,000,000 in cumulative flood damages prevented. Over 407,000 recreation visits with a local economic impact of more than $9,300,000 took place at Council Grove Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT NAME: El Dorado Lake, KS

AUTHORIZATION: Flood Control Act of 1965

LOCATION AND DESCRIPTION: El Dorado Lake is located at river mile 114.7 on the Walnut River, a tributary of the Arkansas River, about 2 miles northeast of the town of El Dorado in Butler County, Kansas. This is a multi-purpose project with flood control, water supply, water quality control, and recreation outputs. The project consists of a 20,850 feet long earth embankment with spillway. At conservation pool the lake covers 7,997 acres.

CONFERENCE AMOUNT FOR FY 2013: $831,000 2/
BUDGET AMOUNT FOR FY 2014: M: $294,000 O: $717,000 T: $1,011,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $850,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $41,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: $112,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1981, El Dorado Lake has more than $286,000,000 in cumulative flood damages prevented. Over 1,050,000 recreation visits with a local economic impact of more than $26,400,000 took place at El Dorado Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT NAME: Elk City Lake, KS

AUTHORIZATION: Flood Control Act of 1941

LOCATION AND DESCRIPTION: Elk City Lake is located on the Elk River at river mile 8.7, about 7 miles east of the town of Elk City in Montgomery County, Kansas. This is a multi-purpose project with flood control, water supply, water quality, recreation, and fish and wildlife outputs. The project consists of a 4,840 feet earth embankment with an uncontrolled spillway, 16 feet conduit, and stilling basin. At conservation pool the lake covers 4,118 acres.

CONFERENCE AMOUNT FOR FY 2013: $795,000 2/
BUDGET AMOUNT FOR FY 2014: M: $456,000 O: $651,000 T: $1,107,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $894,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance consists of paving the gate tower and outlet channel roads ($270,000).

RC: $156,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: $47,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1966, Elk City Lake has more than $470,000,000 in cumulative flood damages prevented. Over 130,000 recreation visits with a local economic impact of more than $3,200,000 took place at Elk City Lake in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT NAME: Fall River Lake, KS

AUTHORIZATION: Flood Control Act of 1941

LOCATION AND DESCRIPTION: Fall River Lake is located on the Fall River at river mile 54.2, about 4 miles northwest of the town of Fall River in Greenwood County, Kansas. This is a multi-purpose project with flood control, water quality, fish and wildlife, and supplemental water supply outputs. The project consists of a 5,455 foot long earth embankment with a gate weir and two tainter gates. At conservation pool the lake covers 2,350 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,429,000 2/
BUDGET AMOU7NT FOR FY 2014: M: $258,000 O: $934,000 T: $1,192,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: $901,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $269,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: $22,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1949, Fall River Lake has more than $475,000,000 in cumulative flood damages prevented. Over 141,000 recreation visits with a local economic impact of more than $3,300,000 took place at Fall River Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: John Redmond Dam and Reservoir, KS

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION: John Redmond Dam and Reservoir is located on the Grand (Neosho) River at river mile 343.7, about 3 miles northwest of the town of Burlington in Coffey County, Kansas. This is a multi-purpose project with flood control, water supply, water quality control, and recreation outputs. The project is additionally operated for wildlife objectives. The project consists of a 21,790 feet long structure made up of an earth-filled embankment and a gated ogee weir, concrete spillway with fourteen 40 by 35 feet high tainter gates located in the left abutment. At conservation pool the lake covers 8,084 acres.

CONFEENCE AMOUNT FOR FY 2013: $1,251,000 2/
BUDGET AMOUNTFOR FY 2014: M: $280,000 O: $1,285,000 T: $1,565,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,112,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $302,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: $116,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $35,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1964, John Redmond Dam and Reservoir has more than $740,000,000 in cumulative flood damages prevented. Over 110,000 recreation visits with a local economic impact of more than $2,500,000 took place at John Redmond Dam and Reservoir in FY 2010. The Tulsa District is currently undertaking a water supply reallocation study at the request of the State of Kansas (water supply contract holder) to address current and future water supply demands at the lake. The State of Kansas has also started permit coordination efforts to obtain approval to mechanically dredge within the reservoir in order to increase the current water supply amount available for use at the Wolf Creek nuclear plant downstream of the project.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern District: Tulsa John Redmond Dam and Reservoir, KS

O&M JUSTIFICATION SHEET

PROJECT NAME: Marion Lake, KS

AUTHORIZATION: Flood Control Act of 1950

LOCATION AND DESCRIPTION: Marion Lake is located on the Cottonwood River at river mile 126.7, about 3 miles northwest of the town of Marion in Marion County, Kansas. This is a multi-purpose project with flood control, water supply, water quality, and recreation outputs. The project consists of an 8,375 foot long rolled earth-filled embankment with a gate-controlled, concrete gravity ogee weir containing three 40 by 40 feet tainter gates. At conservation pool the lake covers 6,210 acres.

CONFERENCE AMOUNT FOR FY 2013: $2,578,000 2/
BUDGET AMOUNT FOR FY 2014: M: $198,000 O: $1,883,000 T: $2,081,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,328,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $723,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: $22,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1968, Marion Lake has more than $345,000,000 in cumulative flood damages prevented. Over 402,000 recreation visits with a local economic impact of more than $9,900,000 took place at Marion Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pearson-Skubitz Big Hill Lake, KS

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Pearson-Skubitz Big Hill Lake is located at river mile 33.3 on Big Hill Creek, a tributary of the Verdigris River, about 4.5 miles east of the town of Cherryvale in Labette County, Kansas. This is a multi-purpose project with flood control, water supply, recreation, and fish and wildlife outputs. The project consists of a rolled earth-filled embankment that is 3,902 feet long with a broad crested weir and two drop inlet structures. At conservation pool the lake covers 1,240 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,485,000 2/
BUDGET AMOUNT FOR FY 2014: M: $194,000 O: $1,188,000 T: $1,382,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $699,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $649,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and break-down maintenance.

H: N/A

EN: $26,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1981, Pearson-Skubitz Big Hill Lake has more than $60,000,000 in cumulative flood damages prevented. Over 148,000 recreation visits with a local economic impact of more than $3,700,000 took place at Pearson-Skubitz Big Hill Lake in FY 2010 .

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Toronto Lake, KS

AUTHORIZATION: Flood Control Act of 1941

LOCATION AND DESCRIPTION: Toronto Lake is located on the Verdigris River at river mile 271.5, about 4 miles southeast of the town of Toronto in Woodson County, Kansas. This is a multi-purpose project with flood control, water supply, water quality, fish and wildlife, and recreation outputs. The project consists of a rolled impervious and random earth-filled embankment that is 4,712 feet long with a gate-controlled, concrete, gravity, ogee weir with eight 40x25 foot tainter gates. At conservation pool the lake covers 2,660 acres.

CONFERENCE AMOUNT FOR FY 2013: $904,000 2/
BUDGET AMOUNT FOR FY 2014: M: $398,000 O: $498,000 T: $896,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $835,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of replacing sluice gate counterbalance valves and repairing riprap along the downstream outlet channel ($250,000).

RC: $24,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $27,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1960, Toronto Lake has more than $490,000,000 in cumulative flood damages prevented. Over 138,000 recreation visits with a local economic impact of more than $3,400,000 took place at Toronto Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

MISSOURI

O&M JUSTIFICATION SHEET

PROJECT NAME: Clearwater Lake, MO

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Clearwater Lake is located near Piedmont, Missouri, in Reynolds and Wayne Counties. There are 898 square miles of drainage area above the dam. The primary purpose is flood risk management, but the project also provides environmental and recreation outputs.

CONFERENCE AMOUNT FOR FY 2013: $3,291,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $1,046,000 O: $2,533,000 T: $3,579,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,495,000 – Funds will be used for critical routine operation of dam, reservoir, service facilities and permanent operating equipment; inspection of structures and equipment; and maintenance of tractor gates, hoists, overhead bridge crane and emergency generator. Non-routine maintenance activities include replacement of 30 tons of heating and cooling capacity with new ground source (geothermal) heat pump system and replacement of exterior incandescent fixtures, fluorescent interior fixtures, and fluorescent shop bulbs with high efficiency LED alternatives ($305,000). These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide increased efficiency, and lower future repair costs.

RC: $986,000 – Funds will be used for routine operation and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance.

H: N/A

EN: $98,000 – Funds will be used for routine operation and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: N/A

OTHER INFORMATION: Clearwater Lake has more than $277,368,000 in cumulative flood damages prevented. Over 466,000 recreation visits, with a local economic impact of more than $15,312,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Table Rock Lake, MO & AR

AUTHORIZATION: Flood Control Act of 1938 as amended by the Flood Control Acts of 1941 and 1944

LOCATION AND DESCRIPTION: Table Rock Lake is located in Branson, Missouri and is one of five multiple-purpose projects within the White River Basin. The primary purposes of the lake are power generation flood risk management and recreation. The project contains four 50,000 kW hydropower generator units.

CONFERENCE AMOUNT FOR FY 2013: $8,254,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $1,595,000 O: $6,990,000 T: $8,585,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,758,000 – Funds will be used for critical routine operation and maintenance; inspection and maintenance of structures and equipment; routine operation of dam, reservoir, service facilities and permanent operating equipment; critical routine operations and maintenance for the joint costs associated with the dam, powerplant and project; and maintenance of tainter gates, sluice gates, overhead crane, and emergency generator. These funds would improve flood risk management performance by reducing the risk of failure, flooding, loss of life and environmental damage, provide increased efficiency, and lower future repair costs.

RC: $2,289,000 – Funds will be used for routine operations and maintenance for recreation; implementation of law enforcement agreements; perform water management analysis (control and quality); real estate management; and environmental compliance; water management of water control data systems; and operation and maintenance of a visitor center.

H: $3,748,000 – Funds will be used for critical routine operation and maintenance for hydropower generations and power plant equipment; routine operations and maintenance of joint operations of power plant and dam components; and compliance with NERC/FERC reliability standards. These funds would improve hydropower performance, reduce loss of power production, increase unit availability, reduce the chance of long term outages, provide revenue to the Treasury, and improve hydrological modernization initiative priority activities.

EN: $790,000 – Funds will be used for routine operations and maintenance for environmental stewardship; improve acres of habitat; maintain boundary line; and daily management of facilities, natural resources, special status species, invasive species, and environmental compliance inspections.

WS: N/A

OTHER INFORMATION: Table Rock Lake has more than $206,282,000 in cumulative flood damages prevented. Over 4,792,000 recreation visits, with a local economic impact of more than $120,840,000, took place in FY 2010.

1/ Estimated Unobligated "Carry-In" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

OKLAHOMA

O&M JUSTIFICATION SHEET

PROJECT NAME: Arcadia Lake, OK

AUTHORIZATION: Flood Control Act of 1970

LOCATION AND DESCRIPTION: Arcadia Lake is located on the Deep Fork River at river mile 218.3, in the metropolitan area of Oklahoma City and Edmond in Oklahoma County, Oklahoma. This is a multi-purpose project with flood control, water supply, and recreation outputs. The project consists of a 5,250 feet long rolled earth-filled embankment with an uncontrolled saddle spillway and 7 by 10 feet conduit controlled by two conduit gates. At conservation pool the lake covers 1,820 acres.

CONFERENCE AMOUNT FOR FY 2013: $521,000 2/
BUDGET AMOUNT FOR FY 2014: M: $56,000 O: $567,000 T: $623,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $563,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $39,000 – Funds will be used for routine operations and maintenance of activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $13,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1986, Arcadia Lake has more than $29,000,000 in cumulative flood damages prevented. Over 619,000 recreation visits with a local economic impact of more than $15,000,000 took place at Arcadia Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Birch Lake, OK

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Birch Lake is located at river mile 0.8 on Birch Creek, a tributary of Bird Creek, about 1.5 miles south of the town of Barnsdall in Osage County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality control, recreation, and fish and wildlife outputs. The project consists of a 3,193 foot long rolled earth-filled embankment with an uncontrolled spillway and 7.5 by 10 feet conduit controlled by two slide gates. At conservation pool the lake covers 1,137 acres.

CONFERENCE AMOUNT FOR FY 2013: $809,000 2/
BUDGET AMOUNT FOR FY 2014: M: $165,000 O: $560,000 T: $725,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $515,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $194,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $16,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1977, Birch Lake has more than $126,000,000 in cumulative flood damages prevented. Over 61,000 recreation visits with a local economic impact of more than $1,500,000 took place at Birch Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Broken Bow Lake, OK

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: Broken Bow Lake is located on the Mountain Fork River, a tributary of the Little River, at river mile 20.3, approximately 9 miles northeast of the town of Broken Bow in McCurtain County, Oklahoma. This is a multi-purpose project with flood control, hydroelectric power, water supply, recreation, and fish and wildlife outputs. The project consists of a 2,750 feet long rolled earth-filled embankment with a concrete ogee weir controlled spillway and two 50,000 kW generators. At conservation pool the lake covers 14,200 acres.

CONFERENCE AMOUNT FOR FY 2013: $2,425,000 2/
BUDGET AMOUNT FOR FY 2014: M: $3,704,000 O: $2,000,000 T: $5,704,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:
N: N/A

FRM: $2,915,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance consists of replacing the tainter gate bulkhead and bulkhead mooring system ($2,000,000), and removal of vegetation from embankment ($213,000).

RC: $121,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: $2,615,000 – Funds will be used for routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment; performing preventative, routine, and limited breakdown maintenance on equipment; inspecting equipment for suitability of service; and improve hydrological modernization initiative priority activities. Budgeted non-routine maintenance consists of replacing the unwatering and station drainage system ($350,000), and repairing penstock expansion joints and painting the penstocks ($350,000).

EN: $43,000 - Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 - Funds will be used for monitoring of water usage; management of current water storage agreements; and tracking water storage contract billing and payments.

OTHER INFORMATION: Since construction in 1970, Broken Bow Lake has more than $85,000,000 in cumulative flood damages prevented. Over 933,000 recreation visits with a local economic impact of more than $21,860,000 took place at Broken Bow Lake in FY2010. The cold water fishery below Broken Bow Lake is one of the premier brown and rainbow trout streams in the south-central United States.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013..

O&M JUSTIFICATION SHEET

PROJECT NAME: Canton Lake, OK

AUTHORIZATION: Flood Control Act of 1938, Flood Control Act of 1946, Flood Control Act of 1948, and the Water Resources Development Act of 1990

LOCATION AND DESCRIPTION: Canton Lake is located on the North Canadian River at river mile 394.3, about 2 miles north of the town of Canton in Blaine County, Oklahoma. This is a multi-purpose project with flood control, water supply, and irrigation outputs. The project consists of a 15,140 foot long rolled earth-filled embankment with a 640 foot gated concrete spillway that rises to a maximum height of 68 feet. Spillway discharges are controlled by sixteen 40x25 foot tainter gates. At conservation pool the lake covers 7,910 acres.

ALLOCATION FOR FY 2013: $ 2,242,000 2/
BUDGET AMOUNT FOR FY 2014: M: $558,000 O: $1,635,000 T: $2,193,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,132,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $1,018,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $35,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1948, Canton Lake has more than $103,000,000 in cumulative flood damages prevented. Over 760,000 recreation visits with a local economic impact of more than $19,785,000 took place at Canton Lake in FY 2010. Canton Lake is currently undergoing construction (funded under the Construction Account) to remediate potential dam safety concerns that include underseepage, and to ensure the project can safely pass the probable maximum flood event.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Copan Lake, OK

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Copan Lake is located at river mile 7.4 on the Little Caney River, a tributary of the Caney River, about 9 miles north of the town of Bartlesville in Washington County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality control, recreation, and fish and wildlife outputs. The project consists of a 7730 foot long rolled earth-filled embankment with a gate controlled, concrete, gravity ogee weir with four 50x35 foot tainter gates. At conservation pool the lake covers 4449 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,352,000 2/
BUDGET AMOUNT FOR FY 2014: M: $198,000 O: $671,000 T: $869,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $614,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $226,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $21,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1983, Copan Lake has more than $847,000,000 in cumulative flood damages prevented. Over 73,000 recreation visits with a local economic impact of more than $2,000,000 took place at Copan Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT NAME: Eufaula Lake, OK

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: Eufaula Lake is located on the Canadian River at river mile 27.0, about 12 miles east of the town of Eufaula in McIntosh County, Oklahoma. This is a multi-purpose project with flood control, water supply, hydroelectric power, and navigation outputs. The project consists of a 3300 feet long rolled earth-filled embankment with a concrete, gravity ogee weir controlled spillway with eleven 40 feet by 32 feet tainter gates. The project contains three hydropower generator units. At conservation pool the lake covers 105,500 acres.

CONFERENCE AMOUNT FOR FY 2013: $5,494,000 2/
BUDGET AMOUNT FOR FY 2014: M: $1,755,000 O: $4,741,000 T: $6,496,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $51,000 – Funds will be used for limited operations and maintenance of structures for navigation water releases for the McClellan-Kerr Arkansas River Navigation System.

FRM: $1,563,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance consists of an energy sustainability package to place the remaining project office buildings on the hydropower grid ($100,000).

REC: $1,969,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: $2,415,000 – Funds will be used for critical routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment and improving hydrological modernization initiative priority activities. Budgeted non-routine maintenance consists of replacing the 480 volt switchgear breakers ($350,000).

EN: $398,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $100,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; and tracking water storage contract billing and payments.

OTHER INFORMATION: Since construction in 1964, Eufaula Lake has more than $500,000,000 in cumulative flood damages prevented. Over 2,295,000 recreation visits with a local economic impact of more than $59,400,000 took place at Eufaula Lake in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fort Gibson Lake, OK

AUTHORIZATION: Flood Control Act of 1941, River and Harbor Act of 1946, and the Water Resources Development Act of 1986

LOCATION AND DESCRIPTION: Fort Gibson Lake is located on the Grand (Neosho) River at river mile 7.7 about 12 miles northeast of the town of Muskogee in Mayes, Wagoner, and Cherokee Counties, Oklahoma. This is a multi-purpose project with flood control and hydroelectric power outputs. The project consists of a 2,990 foot long rolled earth-filled embankment which includes the concrete, gravity ogee weir controlled spillway and the powerhouse intake structure. The spillway is equipped with thirty 40 feet by 35 feet tainter gates, while the powerhouse contains four 11,250 kW hydropower generator units. At conservation pool the lake covers 19,900 acres.

ALLOCATED AMOUNT FOR FY 2013: $4,760,000 2/
BUDGET FOR FY 2014: M: $1,387,000 O: $5,173,000 T: $6,560,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,449,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance includes removal of woody vegetation from embankment ($481,000).

RC: $1,654,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: $3,240,000 – Funds will be used for critical routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment. Budgeted non-routine maintenance includes removal of woody vegetation from embankment ($444,000).

EN: $217,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1949, Fort Gibson Lake has more than $390,000,000 in cumulative flood damages prevented. Over 1,972,000 recreation visits with a local economic impact of more than $46,700,000 took place at Fort Gibson Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Fort Supply Lake, OK

AUTHORIZATION: Flood Control Act of 1936

LOCATION AND DESCRIPTION: Fort Supply Lake is located at river mile 5.5 on Wolf Creek, a tributary of the North Canadian River, about 12 miles northwest of the town of Woodward in Woodward County, Oklahoma. This is a multi-purpose project with flood control and conservation storage (water supply) outputs. The project consists of an 11,865 foot long rolled earth-filled embankment with an uncontrolled, concrete, chute-type spillway. Spillway discharges are controlled by three 7x16 foot vertical lift gates. At conservation pool the lake covers 1,820 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,086,000 2/
BUDGET AMOUNT FOR FY 2014: M: $153,000 O: $730,000 T: $883,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $462,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $405,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $16,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1942, Fort Supply Lake has more than $41,000,000 in cumulative flood damages prevented. Over 302,000 recreation visits with a local economic impact of more than $6,900,000 took place at Fort Supply Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013

O&M JUSTIFICATION SHEET

PROJECT NAME: Great Salt Plains Lake, OK

AUTHORIZATION: Flood Control Act of 1936

LOCATION AND DESCRIPTION: Great Salt Plains Lake is located on the Salt Fork of the Arkansas River at river mile 103.3 about 12 miles east of the town of Cherokee in Alfalfa County, Oklahoma. This is a multi-purpose project with flood control, conservation, recreation, and fish and wildlife outputs. The project consists of a rolled earth-filled embankment and concrete spillway having a total crest length of 6,010 feet and rising to a maximum height of 68 feet above the streambed. At top of the flood control pool, the lake covers 25,660 acres.

CONFERENCE AMOUNT FOR FY 2013: $501,000 2/
BUDGET AMOUNT FOR FY 2014: M: $99,000 O: $277,000 T: $376,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $306,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of repairing spalls on the spillway weirs ($50,000).

RC: $34,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $36,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1941, Great Salt Plains Lake has more than $247,000,000 in cumulative flood damages prevented. Over 198,000 recreation visits with a local economic impact of more than $7,800,000 took place at Great Salt Plains Lake in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Heyburn Lake, OK

AUTHORIZATION: Flood Control Act of 1946

LOCATION AND DESCRIPTION: Heyburn Lake is located at river mile 48.6 on Polecat Creek, a tributary of the Arkansas River, about 11 miles southwest of the town of Sapulpa in Creek County, Oklahoma. This is a multi-purpose project with flood control and conservation (water supply, recreation, and fish and wildlife) outputs. The project consists of a 2,920 foot long rolled earth-filled embankment with an uncontrolled spillway. At conservation pool the lake covers 877 acres.

ALLOCATED AMOUNT FOR FY 2013: $629,000 2/
BUDGET FOR FY 2014: M: $81,000 O: $515,000 T: $596,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $304,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $240,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $37,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $15,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1950, Heyburn Lake has more than $64,000,000 in cumulative flood damages prevented. Over 136,000 recreation visits with a local economic impact of more than $3,200,000 took place at Heyburn Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Hugo Lake, OK

AUTHORIZATION: Flood Control Act of 1946

LOCATION AND DESCRIPTION: Hugo Lake is located on the Kiamichi River at river mile 17.6, about 7 miles east of the town of Hugo in Choctaw County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality, recreation, and fish and wildlife outputs. The project consists of a 10,200 feet long rolled earth-filled embankment with a gate controlled, concrete gravity ogee weir spillway with six 40 by 50 feet gates. At conservation pool the lake covers 13,144 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,716,000 2/
BUDGET AMOUNT FOR FY 2014: M: $1,405,000 O: $1,461,000 T: $2,866,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,015,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance actions will consist of filling embankment erosion and constructing a new bulkhead mooring location ($1,000,000) and an energy sustainability package to install a ground source HVAC system to the project office ($185,000).

RC: $777,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $59,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $15,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1974, Hugo Lake has more than $152,000,000 in cumulative flood damages prevented. Over 402,000 recreation visits with a local economic impact of more than $9,800,000 took place at Hugo Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Hulah Lake, OK

AUTHORIZATION: Flood Control Act of 1936

LOCATION AND DESCRIPTION: Hulah Lake is located at river mile 96.2 on the Caney River, a tributary of the Verdigris River, about 15 miles northwest of the town of Bartlesville in Osage County, Oklahoma. This is a multi-purpose project with flood control, water supply, low flow regulation, and conservation outputs. The project consists of a 10,200 feet long rolled earth-filled embankment with a gate controlled, concrete gravity ogee weir spillway with ten 40 by 25 feet tainter gates. At conservation pool the lake covers 3,120 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,751,000 2/
BUDGET AMOUNT FOR FY 2014: M: $164,000 O: $711,000 T: $875,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $789,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $50,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $21,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $15,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1951, Hulah Lake has more than $1,570,000,000 in cumulative flood damages prevented. Over 72,000 recreation visits with a local economic impact of more than $1,700,000 took place at Hulah Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Kaw Lake, OK

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Kaw Lake is located on the Arkansas River at river mile 653.7, about 8 miles east of the town of Ponca City in Kay County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality, hydropower, recreation, and fish and wildlife outputs. The project consists of a 9,466 feet long rolled earth-filled embankment with a gate controlled, concrete gravity ogee weir spillway with eight 50 by 47 foot tainter gates. A single 37 kW generator operated by run of the river is located at the project. At conservation pool the lake covers 16,750 acres.

CONFERENCE FOR FY 2013: $2,413,000 2/
BUDGET AMOUNT FOR FY 2014: M: $1,674,000 O: $1,789,000 T: $3,463,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,445,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance actions include installing a drain system to control left abutment seepage ($1,000,000) and an energy sustainability package to install a ground source HVAC system to the project office ($325,000).

RC: $807,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $211,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Since construction in 1977, Kaw Lake has more than $945,000,000 in cumulative flood damages prevented. Over 216,000 recreation visits with a local economic impact of more than $5,400,000 took place at Kaw Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Keystone Lake, OK

AUTHORIZATION: River and Harbor Act of 1950

LOCATION AND DESCRIPTION: Keystone Lake is located on the Arkansas River at river mile 538.8, about 15 miles west of Tulsa in Tulsa County, Oklahoma. This is a multi-purpose project with flood control, water supply, hydroelectric power, navigation, and fish and wildlife outputs. The project consists of a 4,600 feet long rolled earth-filled embankment with a concrete, gated ogee weir controlled spillway with eighteen 40 feet by 35 feet tainter gates. The project contains two 35,000 kW hydropower generator units. At conservation pool the lake covers 23,610 acres.

CONFERENCE AMOUNT FOR FY 2013: **$13,468,000 2/**
BUDGET AMOUNT FOR FY 2014: M: $1,463,000 O: $3,427,000 T: $4,890,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $66,000 – Funds will be used for limited operations and maintenance of structures for navigation water releases for the McClellan-Kerr Arkansas River Navigation System.

FRM: $1,588,000 – Funds will be used for critical operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $969,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: $1,914,000 – Funds will be used for critical routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment, and improve hydrological modernization initiative priority activities.

EN: $345,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; and tracking water storage contract billing and payments.

OTHER INFORMATION: Since construction in 1964, Keystone Lake has more than $1,510,000,000 in cumulative flood damages prevented. Over 1,081,000 recreation visits with a local economic impact of more than $26,600,000 took place at Keystone Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT NAME: McClellan-Kerr Arkansas River Navigation System, OK

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: The McClellan-Kerr Arkansas River Navigation System provides a route from the Mississippi River through Arkansas and Oklahoma to the head of navigation at the Port of Catoosa near Tulsa, Oklahoma. The navigation channel has a minimum depth of 9 feet and minimum widths of 250 feet on the Arkansas River and 150 feet on the Verdigris River. Total length of the Tulsa District portion of the system is 137 navigation miles. The three locks on the project have chambers that are 110 by 600 feet in size with 20-21 feet normal lifts.

CONFERENCE AMOUNT FOR FY 2013: $5,552,000 2/
BUDGET AMOUNT FOR FY 2014: M: $785,000 O: $4,589,000 T: $5,374,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $5,000,000 – Funds will be used for critical routine operations and maintenance for navigation, including critical fleet maintenance support; channel dredging and upland disposal of dredged material; navigation portion of joint costs for dam safety data; implementation of risk reduction measures; and critical lock and dam inspections. Budgeted non-routine maintenance will consist of installing a new pintle ball and bushing at WD Mayo Lock and Dam ($450,000).

FRM: N/A

RC: $310,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: N/A

EN: $64,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Over 314,000 recreation visits with a local economic impact of more than $7,300,000 took place at the Oklahoma portion of the McClellan-Kerr Arkansas River Navigation System in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Oologah Lake, OK

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Oologah Lake is located on the Verdigris River at river mile 90.2, about 2 miles southeast of the town of Oologah in Rogers County, Oklahoma. This is a multi-purpose project with flood control, water supply, navigation, recreation, and fish and wildlife outputs. The project consists of a 4,000 foot long rolled earth-filled embankment with a gate controlled, modified concrete gravity ogee weir spillway with seven 40x21 foot high radial gates. At conservation pool the lake covers 31,043 acres.

CONFERENCE AMOUNT FOR FY 2013: $5,100,000 2/
BUDGET AMOUNT FOR FY 2014: M: $2,917,000 O: $2,029,000 T: $4,946,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $3,752,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of replacing one service gate and associated wall liners ($2,200,000).

RC: $1,085,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $66,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $43,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1963, Oologah Lake has more than $870,000,000 in cumulative flood damages prevented. Over 1,019,000 recreation visits with a local economic impact of more than $24,400,000 took place at Oologah Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Optima Lake, OK

AUTHORIZATION: Flood Control Act of 1936 as amended by the Flood Control Act of 1950

LOCATION AND DESCRIPTION: Optima Lake is located on the North Canadian River at river mile 623.2, about 4.5 miles northeast of the town of Hardesty in Texas County, Oklahoma. This is a multi-purpose project with flood control, water supply, recreation, and fish and wildlife outputs. The project consists of a 16,900 foot long rolled earth-filled embankment with an uncontrolled emergency spillway. At conservation pool the lake covers 5,340 acres.

CONFERENCE AMOUNT FOR FY 2013: $49,000 2/
BUDGET AMOUNT FOR FY 2014: M: $13,000 O: $31,000 T: $44,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $44,000 – Funds will be used for minimal maintenance and inspection of project structures as required by regulation and sound engineering judgment.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Funds are sufficient to ensure the safety, security, and integrity of the project. In order to reduce annual Civil Works O&M costs, 12,400 acres of the 13,250 acres of Federal lands at Optima Lake are being managed by the U.S. Fish and Wildlife Service and the Oklahoma Department of Wildlife Conservation under licensing and cooperative agreements.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pensacola Reservoir, Lake of the Cherokees, OK

AUTHORIZATION: Flood Control Act of 1941

LOCATION AND DESCRIPTION: Pensacola Reservoir, Lake of the Cherokees, is located on the Grand (Neosho) River at river mile 77.0 about 13 miles southeast of the town of Vinita in Mayes and Delaware Counties, Oklahoma. This is a multi-purpose project with hydroelectric power and flood control outputs. The project consists of a concrete, multiple-arch dam with gated spillways. The total length of the dam and spillways is 6,565 feet. The main spillway is equipped with twenty-one 36 by 25 feet tainter gates, while the two east spillways are equipped with twenty-one 37x15 foot tainter gates. A total of six 20,000 kW power generating units are located within the structure. At power pool the lake covers 46,500 acres.

CONFERENCE AMOUNT FOR FY 2013: $133,000 2/
BUDGET AMOUNT FOR FY 2014: M: $2,000 O: $144,000 T: $146,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $146,000 – Funds will be used for routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: This project was constructed by the Grand River Dam Authority, an Oklahoma State agency, in 1940. Operation of the flood control storage in the reservoir is the responsibility of the US Army Corps of Engineers in accordance with the provisions of Section 7 of the Flood Control Act of 1944.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pine Creek Lake, OK

AUTHORIZATION: Flood Control Act of 1958

LOCATION AND DESCRIPTION: Pine Creek Lake is located on the Little River at river mile 145.3, about 5 miles northwest of the town of Wright City in McCurtain County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality, fish and wildlife, and recreation outputs. The project consists of a 7,712 foot long rolled earth-filled embankment with an uncontrolled, gravity ogee weir spillway. At conservation pool the lake covers 3,750 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,053,000 2/
BUDGET AMOUNT FOR FY 2014: M: $226,000 O: $1,053,000 T: $1,279,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $868,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $363,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $40,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1969, Pine Creek Lake has more than $109,000,000 in cumulative flood damages prevented. Over 274,000 recreation visits with a local economic impact of more than $6,900,000 took place at Pine Creek Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Robert S. Kerr Lock and Dam and Reservoir, OK

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: Robert S. Kerr Lock and Dam and Reservoir is located on the Arkansas River at navigation mile 336.2, about 8 miles south of the town of Sallisaw in LeFlore County, Oklahoma. This is a multi-purpose project with navigation, hydroelectric power, and recreation outputs. The project consists of a 7,230 feet long rolled earth-filled embankment with a concrete, gated ogee weir controlled spillway with eighteen 50 feet by 44 feet tainter gates. The lock is a single-lift Ohio River type with 110 feet by 600 feet long chamber and a normal lift of 48 feet. The project contains four 27,500 kW hydropower generator units. At top of power pool the lake covers 43,796 acres.

CONFERENCE AMOUNT FOR FY 2013: $5,476,000 2/
BUDGET AMOUNT FOR FY 2014: M: $2,339,000 O: $5,103,000 T: $7,442,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $2,662,000 – Funds will be used for critical routine operations and maintenance for navigation, including critical fleet maintenance support; channel dredging and upland disposal of dredged material; navigation portion of joint costs for dam safety data; implementation of risk reduction measures; and critical lock and dam inspections.

FRM: N/A

RC: $404,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: $4,242,000 – Funds will be used for routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment, and improve hydrological modernization initiative priority activities. Budgeted non-routine maintenance will consist of replacing the unit governors ($1,230,000).

EN: $134,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Over 311,000 recreation visits with a local economic impact of more than $7,000,000 took place at Robert S. Kerr Lock and Dam and Reservoir in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Sardis Lake, OK

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Sardis Lake is located at river mile 2.8 on Jackfork Creek, a tributary of the Kiamichi River, about 2.5 miles north of the town of Clayton in Pushmataha County, Oklahoma. This is a multi-purpose project with flood control, water supply, recreation, and fish and wildlife outputs. The project consists of a 14,138 feet long rolled earth-filled embankment with an uncontrolled spillway and a gate tower with two 4 by 12 feet wheel gates. At conservation pool the lake covers 13,610 acres.

CONFERENCE AMOUNT FOR FY 2013: $3,801,000 2/
BUDGET AMOUNT FOR FY 2014: M: $576,000 O: $836,000 T: $1,412,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,104,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of an energy sustainability action to add a ground source HVAC system to the project office ($285,000).

RC: $235,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $63,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1983, Sardis Lake has more than $60,000,000 in cumulative flood damages prevented. Over 112,000 recreation visits with a local economic impact of more than $2,800,000 took place at Sardis Lake in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Skiatook Lake, OK

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Skiatook Lake is located at river mile 14.3 on Hominy Creek, a tributary of Bird Creek, about 5 miles west of the town of Skiatook in Osage County, Oklahoma. This is a multi-purpose project with flood control, water supply, water quality control, recreation, and fish and wildlife outputs. The project consists of a 3,590 feet long rolled earth-filled embankment with an uncontrolled spillway and a gate tower with two 4 by 10 feet gates. At conservation pool the lake covers 10,190 acres.

CONFERENCE AMOUNT FOR FY 2013: $2,012,000 2/
BUDGET AMOUNT FOR FY 2014: M: $522,000 O: $1,344,000 T: $1,866,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,025,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of an energy sustainability action to add a ground source HVAC system to the project office ($285,000).

RC: $771,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $35,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $35,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1984, Skiatook Lake has more than $440,000,000 in cumulative flood damages prevented. Over 544,000 recreation visits with a local economic impact of more than $12,700,000 took place at Skiatook Lake in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Tenkiller Ferry Lake, OK

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Tenkiller Ferry Lake is located on the Illinois River at river mile 12.8, about 22 miles southeast of the town of Muskogee in Cherokee and Sequoyah Counties, Oklahoma. This is a multi-purpose project with flood control and hydroelectric power outputs. The project consists of a 3,000 feet long rolled earth-filled embankment with a concrete, gravity controlled spillway with ten 50 feet by 25 feet tainter gates. The project contains two 19,550 kW hydropower generator units. At conservation pool the lake covers 12,900 acres.

CONFERENCE AMOUNT FOR FY 2013: $5,055,000 2/
BUDGET AMOUNT FOR FY 2014: M: $5,422,000 O: $3,973,000 T: $9,395,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $5,057,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of performing structural repairs on ten tainter gates at the project ($4,000,000).

RC: $1,633,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: $2,440,000 – Funds will be used for routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment, and improve hydrological modernization initiative priority activities. Budgeted non-routine maintenance will consist of replacing the unit governors ($530,000).

EN: $181,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities. Budgeted non-routine activities will entail revising the project master plan ($100,000).

WS: $84,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1952, Tenkiller Ferry Lake has more than $215,000,000 in cumulative flood damages prevented. Over 3,274,000 recreation visits with a local economic impact of more than $83,700,000 took place at Tenkiller Ferry Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Waurika Lake, OK

AUTHORIZATION: PL 88-253

LOCATION AND DESCRIPTION: Waurika Lake is located at river mile 27.0 on Beaver Creek, a tributary of the Red River, about 6 miles northwest of the town of Waurika in Jefferson County, Oklahoma. This is a multi-purpose project with flood control, irrigation, water supply, water quality, recreation, and fish and wildlife outputs. The project consists of a 16,000 foot long rolled earth-filled embankment with an uncontrolled spillway. At conservation pool the lake covers 10,100 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,616,000 2/
BUDGET AMOUNT FOR FY 2014: M: $230,000 O: $1,110,000 T: $1,340,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $815,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

REC: $452,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

HYD: N/A

ES: $55,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $18,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1977, Waurika Lake has more than $189,000,000 in cumulative flood damages prevented. Over 487,000 recreation visits with a local economic impact of more than $12,500,000 took place at Waurika Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Webbers Falls Lock and Dam, OK

AUTHORIZATION: River and Harbor Act of 1946

LOCATION AND DESCRIPTION: Webbers Falls Lock and Dam is located on the Arkansas River at navigation mile 366.6, about 5 miles northwest of the town of Webbers Falls in Muskogee County, Oklahoma. This is a multi-purpose project with navigation and hydroelectric power outputs. The project consists of a 4,370-foot long rolled earth-filled embankment with a concrete, gated ogee weir controlled spillway with twelve 50 feet by 41 feet tainter gates. The lock is a single-lift Ohio River type with a 110-foot by 600-foot long chamber and a normal lift of 30 feet. The project contains three inclined-axis hydropower generator units with a total capacity of 60MW. At top of power pool the lake covers 11,640 acres.

CONFERENCE AMOUNT FOR FY 2013: $3,852,000 2/
BUDGET AMOUNT FOR FY 2014: M: $959,000 O: $4,067,000 T: $5,026,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $2,385,000 – Funds will be used for critical routine operations and maintenance for navigation, including critical fleet maintenance support; channel dredging and upland disposal of dredged material; navigation portion of joint costs for dam safety data; implementation of risk reduction measures; and critical lock and dam inspections. Budgeted non-routine maintenance will consist of procuring a new pintle ball and bushing assembly for the miter gate ($117,000).

FRM: N/A

RC: $633,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: $1,911,000 – Funds will be used for routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment.

EN: $97,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Over 713,000 recreation visits with a local economic impact of more than $16,600,000 took place at Webbers Falls Lock and Dam in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Wister Lake, OK

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Wister Lake is located on the Poteau River at river mile 60.9, about 2 miles south of the town of Wister in LeFlore County, Oklahoma. This is a multi-purpose project with flood control, water supply, low flow augmentation, water conservation, and sedimentation outputs. The project consists of a 5,700 foot long rolled earth-filled embankment with an uncontrolled, concrete, chute-type spillway with a modified broad-crested weir. The conservation pool covers 7,386 acres.

CONFERENCE AMOUNT FOR FY 2013: $738,000 2/
BUDGET AMOUNT FOR FY 2014: M: $1,108,000 O: $692,000 T: $1,800,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,461,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of rehabilitating the 35 ton gantry crane, repairing the toe drain outfall, repairing river bank erosion, replacing electrical service at the gate tower ($750,000), and installing new hoist machinery wire rope and replacing the emergency generator fuel system ($230,000).

RC: $50,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and breakdown maintenance.

H: N/A

EN: $276,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $13,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: Since construction in 1949, Wister Lake has more than $660,000,000 in cumulative flood damages prevented. Over 180,000 recreation visits with a local economic impact of more than $4,300,000 took place at Wister Lake in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

TEXAS

O&M JUSTIFICATION SHEET

PROJECT NAME: Aquilla Lake, TX

AUTHORIZATION: Flood Control Act of 1968

LOCATION AND DESCRIPTION: Aquilla Lake is located in Hill County, 0.8 miles southwest of Hillsboro, Texas. The project consists of an earth fill dam and uncontrolled concrete spillway, which creates a lake with total storage capacity of 146,500 acre-feet, flood control of 93,600 acre-feet, water supply of 34,100 acre-feet, and sediment reserve of 25,700 acre-feet. There is one undeveloped recreation area of 957 acres and six access areas totaling 27 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,176,000 2/
BUDGET FOR FY 2014: M: $467,000 O: $818,000 T: $1,285,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,067,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package ($125,000) is to remove woody growth and control vegetation on dam embankment at toe.

RC: $116,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $82,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $20,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Aquilla Lake has more than $47,241,600 in cumulative flood damages prevented. Over 91,534 recreation visits with a local economic impact of more than $1,225,349 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT NAME: Arkansas-Red River Basins Chloride Control – Area VIII, TX

AUTHORIZATION: Flood Control Act of 1966, as modified by the Flood Control Act of 1970, and as amended by the Water Resources Development Acts of 1974, 1976, and 1986

LOCATION AND DESCRIPTION: The Arkansas-Red River Basins Chloride Control – Area VIII Project is located within the Wichita River basin in northern Texas. This is a single purpose project with water quality control outputs. The project consists of a low flow collection dam on the South Fork of the Wichita River and the Truscott Brine Lake on the North Fork of the Wichita River.

CONFERENCE AMOUNT FOR FY 2013: $1,529,000 2/
BUDGET AMOUNT FOR FY 2014: M: $149,000 O: $1,442,000 T: $1,591,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: $1,591,000 – Funds will be used for routine operations and maintenance at the project; water quality control; intensive wildlife management as required by WRDA 1986; monitoring of endangered and other fish and wildlife species; compliance activities associated with the National Historic Preservation Act; natural resources management; and water quality monitoring.

WS: N/A

OTHER INFORMATION: The Red River Authority of Texas has partnered with a private company and proposed to enhance the method of salt water containment and evaporation at the project through the construction and use of salt gradient solar ponds. These salt gradient solar ponds would be used to generate renewable electricity, which could be sold to nearby military installations to assist them in meeting their energy sustainability goals. The implementation of this proposal would decrease project O&M costs and potentially decrease future construction costs associated with completion of Areas VII and X of the project.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Bardwell Lake, TX

AUTHORIZATION: PL 96-399

LOCATION AND DESCRIPTION: Bardwell Lake is located in Ellis County near the city of Ennis, Texas. The project consists of an earth fill dam, an uncontrolled spillway, and a gated conduit through the dam with two sluice gates. Flood control storage capacity is 85,400 acre-feet. Seven recreation areas comprise 1,238 acres.

CONFERENCE AMOUNT FOR FY2013: $1,915,000 2/
BUDGET AMOUNT FOR FY 2014: M: $594,000 O: $1,256,000 T: $1,850,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,170,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $584,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $81,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $15,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Bardwell Lake has more than $50,312,800 in cumulative flood damages prevented. Over 135,860 recreation visits with a local economic impact of more than $1,392,764 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Belton Lake, TX

AUTHORIZATION: Flood Control Act of 1946 as modified by the Flood Control Act of 1954

LOCATION AND DESCRIPTION: Belton Lake is located on the Leon River in Bell and Coryell Counties near the city of Belton, Texas. The project consists of an earth fill dam, uncontrolled spillway, gated outlet structure, and flood control for 3,560 square miles of the Brazos River Basin. There are 644,200 acre-feet of flood control storage, 136 miles of shoreline and a boundary of 158 miles. Fourteen recreation areas comprise 2,983 acres.

CONFERENCE AMOUNT FOR FY2013: $3,486,000 2/
BUDGET AMOUNT FOR FY 2014: M: $791,000 O: $2,822,000 T: $3,613,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: $1,315,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $2,065,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $223,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Belton Lake has more than $800,682,900 in cumulative flood damages prevented. Over 1,675,383 recreation visits with a local economic impact of more than $18,160,299 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Benbrook Lake, TX

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: Benbrook Lake is located in Tarrant County on the Clear Fork of the Trinity River, 15 river miles upstream from its confluence with the West Fork of the Trinity River, 10 miles southwest of Fort Worth, Texas. The project consists of a rolled earth fill dam (9,130 feet long by 130 feet high); an uncontrolled spillway (500 feet wide); a 13-foot diameter conduit controlled by two (6.5 feet x 13 feet) broom-type gates for inlets; and 2 gated outlets into two 30-inch steel pipe conduits. The flood control storage capacity is 170,350 acre-feet. Benbrook Lake has six recreation areas which comprise 3,033 acres.

CONFERENCE AMOUNT FOR FY2013: $2,313,000 2/
BUDGET AMOUNT FOR FY 2014: M: $1,082,000 O: $1,692,000 T: $2,774,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,443,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package ($500,000) is to repair badly eroded concrete surface of the conduit by installing an epoxy liner.

RC: $1,213,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $101,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $17,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Benbrook Lake has more than $8,948,580,700 in cumulative flood damages prevented. Over 842,292 recreation visits with a local economic impact of more than $11,581,403 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Brazos Island Harbor, TX

AUTHORIZATION: House Document 16, 71st Congress, 2nd Session, 1930, as amended, and PL 99-662

LOCATION AND DESCRIPTION: The Brazos Island Harbor project provides deep draft access from the Gulf of Mexico through a jettied entrance channel to Brownsville, and a side channel, authorized to 36 feet, and shallow draft Fishing Boat Harbor near Port Isabel. The project is 22.8 miles long. The authorized depths are 42 feet for the main channel and 44 feet through the jetties and outer bar. A side channel with a project depth of 36 feet leads to the Port Isabel and an adjacent shallow draft Fishing Boat Harbor.

CONFERENCE AMOUNT FOR FY 2013: $3,560,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $3,200,000 O: $0 T: $3,200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $3,200,000 – Funds will be used for routine annual dredging of the Brazos Island Harbor Jetty Channel to project depth with placement on adjacent shoreline of South Padre Island ($3,200,000). These funds will improve navigation performance and project reliability.

FRM: N/A

RC: N/A

H: N/A

En: N/A

WS: N/A

OTHER INFORMATION: Based on an economic impact study, the effect of not maintaining the channel to 42 feet results in cost penalties over $5,700,000 per year for a 38 feet draft restriction and $19,400,000 for a 35 feet restriction.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Buffalo Bayou and Tributaries, TX

AUTHORIZATION: House Document 456, 75th Congress, 2nd Session 1938 and modified by the Flood Control Act of 1954

LOCATION AND DESCRIPTION: The Buffalo Bayou and Tributaries project is located on Buffalo Bayou and Mayde Creek on the west side of the City of Houston, in Harris and Fort Bend Counties, Texas. Addicks Dam and Reservoir is an earthen dam 61,166 feet long and 48.5 feet above the Mayde Creek streambed with a storage capacity of 200,000 acre-feet. Barker Dam and Reservoir is an earthen dam 71,960 feet long and 36.5 feet above the Buffalo Bayou streambed with a storage capacity of 209,000 acre-feet. These reservoirs are designed to reduce flooding in the City of Houston.

CONFERENCE AMOUNT FOR FY 2013: $2,862,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $530,000 O: $2,354,000 T: $2,884,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,884,000 – Funds will be used for critical routine operation of the project, implementing the stream gauging and water control bill-back programs, and updating reservoir regulation emergency operation schedules. The funds will also be used for Dam Safety work to clean piezometers, survey structures, and survey top of dam.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Both dams were screened by the National Dam Safety Cadre and were reclassified as DSAC-1 (the highest risk category) due to their location on the west side of the City of Houston, TX and the high population at risk if a dam failure occurred.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Canyon Lake, TX

AUTHORIZATION: River and Harbor Act of 1945 as modified by the Flood Control Act of 1954

LOCATION AND DESCRIPTION: Canyon Lake is located in Comal County, 12 miles northwest of New Braunfels, Texas, on the Guadalupe River. The project consists of a rolled earth fill dam, an uncontrolled spillway and one conduit controlled by two slide gates. The flood control storage is 354,600 acre-feet. Eight recreation areas comprise 1,544 acres.

CONFERENCE AMOUNT FOR FY2013: $3,321,000 2/
BUDGET AMOUNT FOR FY 2014: M: $399,000 O: $2,579,000 T: $2,978,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: $1,236,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $1,578,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $157,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $7,000 - Funds will be used to monitor water usage; manage current water storage agreements and track water storage contract billing and payments.

OTHER INFORMATION: Canyon Lake has more than $600,598,900 in cumulative flood damages prevented. Over 899,555 recreation visits with a local economic impact of more than $16,073,926 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Cedar Bayou, TX

AUTHORIZATION: Senate Document 107, 71st Congress, 2nd Session

LOCATION AND DESCRIPTION: The Cedar Bayou project is a shallow draft navigation channel adjacent to the Houston and Bayport Ship Channels. The improved portion of the channel extends from its junction with the Houston Ship Channel near Mile 25 eastward across Galveston Bay to the mouth of Cedar Bayou to a point 3 miles upstream. The project dimensions are 10 by 100 feet.

CONFERENCE AMOUNT FOR FY 2013: $227,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $0 O: $100,000 T: $100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $100,000 – Funds will be used for completion of the Dredge Material Management Plan (DMMP) to develop new placement areas and beneficial use sites in preparation for future channel maintenance dredging.

FRM: N/A

REC: N/A

HYD: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: The project is classified as a moderate deep draft port (between 1 - 10 million tons of commercial cargo per year) as it supports barge traffic for Koppel Steel, Gendal United Steel and Bayer Corp. The Cedar Bayou Dredge Material Management Plan requires completion in order to develop new placement areas and beneficial use sites in preparation for future channel maintenance dredging.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Channel to Port Bolivar, TX

AUTHORIZATION: Senate Document 99, 90th Congress, 2nd Session

LOCATION AND DESCRIPTION: The Channel to Port Bolivar project is a shallow draft channel extending from deep water in the Bolivar Road Channel northward to the tip of Bolivar Peninsula. The channel is 14-feet deep, 300-feet wide, and approximately 950 feet long. It is maintained to accommodate the Texas Department of Transportation Galveston-Bolivar ferry.

CONFERENCE AMOUNT FOR FY 2013: $409,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $400,000 O: $0 T: $400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $400,000 – Funds will be used for annual maintenance dredging of the main channel to project depth. This will improve navigation performance and project reliability.

FRM: N/A

REC: N/A

HYD: N/A

ES: N/A

WS: N/A

OTHER INFORMATION: Channel to Port Bolivar is utilized heavily by Texas Department of Transportation's Ferry System for public transportation. Dredging to project depth ensures safe and reliable ferry usage. The ferry system serves as the only feasible access to/from Bolivar Peninsula from/to Galveston Island. It provides a hurricane evacuation route for the residents of Bolivar Island, an emergency services system for transporting Bolivar Island residents to Galveston hospital facilities, and a means for businesses and residents to traverse the area.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Corpus Christi Ship Channel, TX

AUTHORIZATION: Senate Document 99, 90th Congress, 2nd Session

LOCATION AND DESCRIPTION: The Corpus Christi Ship Channel (CCSC) is a 45 feet deep channel that extends from the Gulf of Mexico, 34 miles into the Port of Corpus Christi.

CONFERENCE AMOUNT FOR FY 2013: $8,129,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $7,250,000 O: $0 T: $7,250,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $7,250,000 – Funds will be used to perform maintenance dredging within the Corpus Christi Entrance Channel to project depth ($3,500,000), the La Quinta Channel to advance maintenance depth ($2,750,000), and perform levee improvements at PA #2 ($1,000,000). These funds will improve navigation performance and project reliability.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Port of Corpus Christi is ranked 6th in the nation with respect to commercial import and export tonnage. The CCSC is utilized by high commercial and recreational traffic - oil tankers, barges, and private fishing and recreational vessels that share navigation in the area. The major commodities that come through the port include crude oil, gasoline, fuel oil, bauxite, feed stock, and wheat. Maintenance of the channel is critical for oil and product tankers transiting to/from the refineries in Corpus Christi, and to the increased need for full channel limits to accommodate new tension-leg platform (TLP) and semi-submersible oil rigs utilizing the channel. The Port of Corpus Christi will see a substantial increase in tonnage by the export of coal as New ELK Coal Company, a U.S. subsidiary of Cline Mine Corporation out of Toronto, Canada will begin using the port as its port of export to Europe, Brazil and Asia. Construction of the La Quinta Channel Extension to a depth of 39 feet is scheduled for completion in summer 2013. The Local Sponsor is pursuing non-Federal deepening of the entire La Quinta Channel from 39 feet to 45 feet, with construction scheduled to commence in summer 2013.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Denison Dam, Lake Texoma, TX and OK

AUTHORIZATION: Flood Control Act of 1938

LOCATION AND DESCRIPTION: Denison Dam, Lake Texoma is located on the Red River at river mile 725.9, about 5 miles northwest of the town of Denison in Grayson County, Texas. This is a multi-purpose project with flood control, water supply, hydroelectric power, regulation of Red River flows, improvement of navigation, and recreation outputs. The project consists of a 17,200 feet long rolled earth-filled embankment with an uncontrolled concrete, gravity chute-type spillway and six 9 feet by 19 feet vertical lift gates. The project contains two 35,000 kW hydropower generator units. At top of power pool the lake covers 74,686 acres.

CONFERENCE AMOUNT FOR FY 2013: $7,137,000 2/
BUDGET AMOUNT FOR FY 2014: M: $4,025,000 O: $7,202,000 T: $11,227,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $5,245,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data. Budgeted non-routine maintenance will consist of replacing two flood gates ($2,889,000).

RC: $2,698,000 – Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and limited breakdown maintenance.

H: $2,565,000 – Funds will be used for critical routine operations and maintenance activities required to keep the powerhouse and associated equipment operating efficiently, including operation of generating units and auxiliary equipment, with focus on improving hydrological modernization initiative priority activities. Budgeted non-routine maintenance will consist of replacing the station air compressors, battery chargers, and the inverter ($200,000).

EN: $679,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities. Updating the project master plan is part of the budgeted activities planned for FY 2014 ($200,000).

WS: $40,000 – Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Since construction in 1944, Denison Dam, Lake Texoma has more than $972,000,000 in cumulative flood damages prevented. Over 6,205,000 recreation visits with a local economic impact of more than $166,700,000 took place at Denison Dam, Lake Texoma in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Division: Southwestern District: Tulsa Denison Dam, Lake Texoma, TX and OK

O&M JUSTIFICATION SHEET

PROJECT NAME: Estelline Springs Experimental Project, TX

AUTHORIZATION: Flood Control Act of 1966

LOCATION AND DESCRIPTION: The Estelline Springs Experimental Project is located on the Prairie Dog Town Fork of the Red River, about 0.5 miles east of the town of Estelline in Hall County, Texas. This is a single purpose project with water quality control outputs. The project consists of an earthen ring dike nine feet high and 340 feet in diameter that surrounds Estelline Springs.

CONFERENCE AMOUNT FOR FY 2013: $42,000 2/
BUDGET AMOUNT FOR FY 2014: M: $0 O: $43,000 T: $43,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: $43,000 – Funds will be used for routine operations and maintenance at the project; water quality control; intensive wildlife management as required by WRDA 1986; monitoring of endangered and other fish and wildlife species; compliance activities associated with the National Historic Preservation Act; natural resources management; and water quality monitoring.

WS: N/A

OTHER INFORMATION: Construction of the Estelline Springs Experimental Project started in 1963 and was completed and placed in permanent operation in 1964.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Ferrells Bridge Dam – Lake O'The Pines, TX

AUTHORIZATION: Flood Control Acts of 1937 and 1946

LOCATION AND DESCRIPTION: Ferrells Bridge Dam – Lake O'The Pines is located on Cypress Creek in Marion, Harrison, Upshur, Morris, Camp and Titus Counties, eight miles west of the city of Jefferson, Texas. The project consists of an earth fill embankment and two conduits. Flood control storage is 587,200 acre-feet and water supply storage is 279,900 acre-feet. Thirty-four recreation areas comprise 758 acres.

CONFERENCE AMOUNT FOR FY2013: $3,529,000 2/
BUDGET AMOUNT FOR FY 2014: M: $1,174,000 O: $2,226,000 T: $3,400,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: $1,482,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $1,472,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $438,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Ferrells Bridge Dam - Lake O'The Pines has more than $80,184,800 in cumulative flood damages prevented. Over 1,105,318 recreation visits with a local economic impact of more than $14,508,894 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Freeport Harbor, TX

AUTHORIZATION: House Document 289, 93rd Congress, 2nd Session

LOCATION AND DESCRIPTION: The Freeport Harbor project is located in the vicinity of Freeport, in Brazoria County, Texas. The project is a deep draft navigation channel 45 feet deep by 400 feet wide extending 8.5 miles in length from the Gulf of Mexico through a jettied entrance channel to the port facilities.

CONFERENCE AMOUNT FOR FY 2013: $8,848,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $8,300,000 O: $0 T: $8,300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $8,300,000 – Funds will be used for annual maintenance dredging of the Freeport Entrance Channel to project depth ($7,000,000) and perform dewatering activities on PA #1 ($1,300,000). Funding will improve navigation performance and project reliability.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Local Sponsor has obtained a permit to widen channel Freeport channel with non-Federal funding. The project will be widened from 45 feet by 400 feet to 45 feet by 600 feet in the Entrance Channel and 45 feet by 540 feet in the Jetty Channel. Channel widening will provide the ability to maintain two-way traffic of the wider Liquid Natural Gas (LNG) ships scheduled to call the port. The Port of Freeport currently handles 26.7 million tons of commerce annually (16th in foreign tonnage and 27th overall).

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Galveston Harbor and Channel, TX

AUTHORIZATION: House Document 121, 92nd Congress

LOCATION AND DESCRIPTION: The Galveston Harbor project is located in the vicinity of the city of Galveston in Galveston County, Texas. Galveston Harbor project is a 45 feet deep by 800 feet wide channel extending approximately 23.9 miles from deep water in the Gulf of Mexico through jetties to Galveston Bay near Bolivar Road and to the port facilities.

CONFERENCE AMOUNT. FOR FY 2013: $3,914,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $6,300,000 O: $0 T: $6,300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $6,300,000 – Funds will be used for maintenance dredging of the Galveston Entrance Channel to project depth ($4,300,000) and the advance maintenance depth ($2,000,000). The funds will improve navigation performance and project reliability.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Ranked 12th in the world for cruise lines and first cruise port in the Gulf of Mexico, the Port of Galveston welcomed over 800,000 passengers last year. Also the port ranks 41st as it moved over 13.9 million tons in 2010 consisting of containers, break-bulk, fertilizers and roll-on, roll-off cargo. The Galveston Harbor project provides the entrance channel for the Ports of Houston and Texas City and Galveston (Ranked #2, #10 & #41 in the nation, respectively). The Galveston Harbor Entrance Channel is the busiest channel in North America with respect to tonnage and number of trips.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: GIWW, Channel to Victoria, TX

AUTHORIZATION: PL 100-676

LOCATION AND DESCRIPTION: The Channel to Victoria project is located in the vicinities of Seadrift and Victoria in Calhoun and Victoria Counties, Texas. The Channel to Victoria project is a shallow-draft project 12 feet deep by 200 feet wide and 35.4 miles extending from the Gulf Intracoastal Waterway at Mile 492 northwesterly across San Antonio Bay to the Port of Victoria. The Channel to Seadrift portion of the project provides a 12 feet by 2 mile shallow draft channel from the Channel to Victoria northeasterly and terminating at the facilities at Seadrift.

CONFERENCE AMOUNT FOR FY 2013: $363,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $3,200,000 O: $0 T: $3,200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $3,200,000 – Funds will be used to perform minimal levee improvements for PA #1 ($1,000,000) and for maintenance dredging of the Victoria Middle Reach to project depth ($2,200,000). These funds will improve navigation performance and project reliability.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Port of Victoria ranked 89th in the Nation with respect to commercial tonnage in 2011. A sharp increase in tonnage was realized in 2012. Tonnage is expected to triple from 2.8 million tons in 2011 to 7.5 million tons in 2013. The increase is attributed to recent installation of the Catapillar manufacturing facility and one million barrels per month of crude oil being barged from Victoria to regional refineries. Innovations in oil recovery technology (FRACKING) has re-energized oil production within the Eagle Ford Shale Formation; with an estimated sustained production of 25+ years.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: GIWW, Chocolate Bayou, TX

AUTHORIZATION: House Doc. 217, 89th Cong., 1st Sess.

LOCATION AND DESCRIPTION: The Chocolate Bayou project is located between Galveston and Freeport in Brazoria County, Texas. The project provides a shallow draft channel 12 feet deep by 125 feet wide by 21.3 miles in length from the Gulf Intracoastal Waterway at Mile 376 through Chocolate Bay and Chocolate Bayou to the port facilities in the vicinity of Cottonwood Bayou.

CONFERENCE AMOUNT FOR FY 2013: $0 2/
BUDGETED AMOUNT FOR FY 2014: M: $2,800,000 O: $0 T: $2,800,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $2,800,000 – Funds will be used for maintenance dredging Chocolate Bayou Main Channel to project depth. These funds will improve navigation performance and project reliability.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: Historically, shoaling along the channel has required dredging every four years. However, changes in estuary hydrodynamics changed shoaling patterns, and the channel now requires dredging every two - three years. Increased dredge material has exhausted capacity within upland placement areas and Beneficial Use sites. Construction General funding is required to expand these disposal facilities in accordance with the Dredged Material Management Plan.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Gulf Intracoastal Waterway, TX

AUTHORIZATION: PL 77-675 authorized the Laguna Madre reach and the Water Resources Development Act of 1996 authorized the work at Aransas National Wildlife Refuge

LOCATION AND DESCRIPTION: The Gulf Intracoastal Waterway (GIWW) project traverses the entire Texas Coast, from the Sabine River to Port Isabel, TX. The navigation portion of the Main Channel of the GIWW covers a distance of 423 miles, along with other tributaries. The authorized depth and width is generally 12 feet by 125 feet. The GIWW project also includes flood gates and lock structures at the Brazos and Colorado Rivers, respectively.

CONFERENCE AMT. FOR FY 2013: $25,580,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $25,135,000 O: $3,750,000 T: $28,885,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $28,885,000 – Funds will be used for routine operation and maintenance of the facilities at the Brazos River Floodgates ($1,725,000) and Colorado River Locks ($1,825,000), non-routine maintenance at both facilities ($400,000), shoreline protection at the Colorado River Locks ($200,000) and timber guide walls at the Colorado River Locks ($200,000). Funds will be used for maintenance dredging within the following reaches: High Island to Port Bolivar to project depth ($3,133,000) and to advanced maintenance depth ($1,027,000), Route across Matagorda Bay to project depth ($200,000) and to advanced maintenance depth ($200,000), Freeport to Brazos River Crossing to project depth ($9,200,000), Colorado River to Upper Matagorda Bay to project depth ($2,750,000), Turnstake to Live Oak to project depth ($2,400,000), and Corpus Christi to Port Isabel to project depth ($4,000,000). Funds will also be used for routine Mooring Buoy Maintenance ($425,000), Brazos River Mooring Basin Expansion ($500,000), Colorado River Mooring Basin Expansion ($500,000) and completion of the High Island to Brazos River Dredged Material Management Plan ($200,000).

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The navigation structures on the Texas portion of the system do approximately 10,000 commercial lockages a year.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

APPROPRIATION TITLE: Operation and Maintenance

PROJECT NAME: Granger Lake, TX

AUTHORIZATION: Flood Control Acts of 1954 and 1962

LOCATION AND DESCRIPTION: Granger Lake is located on the San Gabriel River in Williamson County, about 10 miles northeast of the city of Taylor. The project consists of a rolled earth fill dam and controlled outlet works with two hydraulically-operated gates. The conservation pool impoundment is 4,400 acres, government fee land consists of 13,602 acres and flood control storage capacity is 178.600 acre-feet. Six recreation areas comprise 1,387 acres.

CONFERENCE AMOUNT FOR FY2013: $2,298,000 2/
BUDGET AMOUNT FOR FY 2014: M: $414,000 O: $1,719,000 T: $2,133,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,207,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package ($79,000) is to replace service and emergency gate motors and brakes.

RC: $817,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $101,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Granger Lake has more than $73,798,300 in cumulative flood damages prevented. Over 200,340 recreation visits with a local economic impact of more than $2,203,231 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Grapevine Lake, TX

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: Grapevine Lake is located in Denton and Tarrant Counties, at river mile 11.7 on Denton Creek, Trinity River Basin, near the city of Grapevine, and approximately 20 miles northwest of the city of Dallas, Texas. The project consists of a rolled earth fill dam, a 500-foot uncontrolled concrete ogee weir spillway, and conduit controlled by two broom-type gates. The flood control/storage capacity is 243,050 acre-feet and conservation/water supply storage is 158,900 acre-feet. Twelve recreation areas comprise 3,660 acres.

CONFERENCE AMOUNT FOR FY2013: $2,696,000 2/
BUDGET AMOUNT FOR FY 2014: M: $525,000 O: $2,116,000 T: $2,641,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,328,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $1,134,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $164,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $15,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Grapevine Lake has more than $15,465,840,600 in cumulative flood damages prevented. Over 2,701,181 recreation visits with a local economic impact of more than $42,292,590 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Hords Creek Lake, TX

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: Hords Creek Lake is located in Coleman County, about 13 miles west of the city of Coleman, Texas. The project consists of an earth fill embankment and one conduit controlled by two gates. The water supply outlet is cast iron pipe and the controlled conduit outlet has two slide gates. Flood control storage is 16,670 acre-feet and water supply storage is 5,684 acre-feet. Three recreation areas comprise 1,215 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,895,000 2/
BUDGET AMOUNT FOR FY 2014: M: $489,000 O: $1,163,000 T: $1,652,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $869,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $737,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $46,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Hords Creek Lake has more than $1,068,800 in cumulative flood damages prevented. Over 206,885 recreation visits with a local economic impact of more than $1,696,089 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Houston Ship Channel, TX

AUTHORIZATION: House Document 101 (30), PL 104-303

LOCATION AND DESCRIPTION: The Houston Ship Channel project consists of reaches varying depths of 45-ft, 40-ft, & 36-ft and, generally, 300-ft in width and approximately 55.4 mile long. The project extends from the Bolivar Roads channel near Galveston, Texas; north, through Galveston Bay, the San Jacinto River, and Buffalo Bayou to the port facilities in Houston, Texas. The project also provides for 40-ft deep channels, which provide access to the container terminals at Bayport and Barbours Terminal. Finally the project provides for a deep and shallow draft channel extending 6.5 miles from the main stem to the port facilities at Greens Bayou. The Port of Houston is ranked 2nd in the nation with respect to commercial import and export tonnage.

CONFERENCE AMOUNT FOR FY 2013: $24,110,000 2/ 3/
BUDGETED AMOUNT FOR FY 2014: M: $29,700,000 O: $450,000 T: $30,150,000 1/ 3/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $30,150,000 – Funds will be used for maintenance dredging to advanced maintenance depth for Bayport to Morgans Point ($5,300,000) and to project depth for Redfish to Beacon 76 ($3,000,000), Sims to Turning Basin ($3,200,000) and Bayport Flare ($2,700,000). Funds will be used for placement area improvements of Peggy Lake PA ($5,000,000), Alexander Island PA ($4,000,000), Glendale PA ($3,000,000), and House Tract PA ($2,500,000). Funds will also be used for placement area de-watering at Spillman PA ($1,000,000) and continuation of project DMMP study ($450,000). These funds will improve navigation performance and project reliability through maintenance dredging and placement area management.

FRM: N/A

RC: N/A

H: N/A

En: N/A

WS: N/A

OTHER INFORMATION: The Houston Ship Channel services the Port of Houston, which is ranked 2nd among U.S. ports, and provides $118 billion in annual economic benefit to the state of Texas, including more than 785,000 jobs. The HSC has 115 private and public facilities, including more than 160 deep-draft berths and a large number of barge docks and industries. Insufficient funds are impacting the ability to maintain authorized project depth and maintain dredge material PA capacity.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

3/ The Houston Ship Channel funding includes the Houston Ship Channel, Bayport Channel, Barbour's Terminal, and Greens Bayou Channels.

O&M JUSTIFICATION SHEET

PROJECT NAME: Jim Chapman Lake, TX

AUTHORIZATION: Flood Control Act of 1954 as amended by the Flood Control Act of 1955

LOCATION AND DESCRIPTION: Jim Chapman Lake is located on the South Sulphur River in Delta and Hopkins Counties, about four miles southeast of the city of Cooper, Texas. The project consists of an earth fill embankment, an uncontrolled spillway, and an outlet works tower. Five recreation areas comprise 2,977 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,736,000 2/
BUDGET AMOUNT FOR FY 2014: M: $714,000 O: $1,044,000 T: $1,758,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,108,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $135,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $500,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $15,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Jim Chapman Lake has more than $21,129,000 in cumulative flood damages prevented. Over 313,304 recreation visits with a local economic impact of more than $3,870,882 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Joe Pool Lake, TX

AUTHORIZATION: River and Harbor Act of 1965

LOCATION AND DESCRIPTION: Joe Pool Lake is located in Dallas, Tarrant and Ellis Counties, about 10 miles southwest of the City of Dallas. The project consists of an earth fill dam with an uncontrolled concrete spillway. Total storage capacity is 304,500 acre-feet (flood control 127,200 acre-feet, water supply 142,900 acre-feet, and sediment reserve 38,000 acre-feet). There are five recreation areas with 3,730 acres.

CONFERENCE AMOUNT FOR FY2013: $1,309,000 2/
BUDGET AMOUNT FOR FY 2014: M: $424,000 O: $584,000 T: $1,008,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $646,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $55,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $280,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $27,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Joe Pool Lake has more than $3,897,387,700 in cumulative flood damages prevented. Over 989,291 recreation visits with a local economic impact of more than $19,404,261 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lake Kemp, TX

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Lake Kemp is located on the Wichita River at river mile 126.7, about 40 miles southwest of the town of Wichita Falls in Wichita County, Texas. This is a multi-purpose project with flood control and conservation outputs. The project consists of a rolled earth-filled embankment and spillway having a total length of 8,890 feet and rising to a maximum height of 115 feet above the streambed. At top of flood control pool the lake covers 15,590 acres.

CONFERENCE AMOUNT FOR FY 2013: $241,000 2/
BUDGET AMOUNT FOR FY 2014: M: $84,000 O: $201,000 T: $285,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $285,000 – Funds will be used for critical routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The city of Wichita Falls, Texas, and Wichita County Water Improvement District No. 2 own Lake Kemp jointly. District No. 2 manages the conservation storage, and the US Army Corps of Engineers manages the flood control storage.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lavon Lake, TX

AUTHORIZATION: River and Harbor Act of 1945 and the Flood Control Acts of 1946 and 1962

LOCATION AND DESCRIPTION: Lavon Lake is located in Collin County, on the East Fork of the Trinity River, about 22 miles northeast of the city of Dallas, Texas. The project consists of an earth embankment, a gate-controlled concrete spillway with twelve tainter gates, and five gate controlled conduits. Flood control storage is 291,600 acre-feet and water supply storage is 443,800 acre-feet. Nineteen recreation areas comprise 2,834 acres.

CONFERENCE AMOUNT FOR FY2013: $3,017,000 2/
BUDGET AMOUNT FOR FY 2014: M: $885,000 O: $2,229,000 T: $3,114,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,360,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $1,527,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $215,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $12,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Lavon Lake has more than $642,189,300 in cumulative flood damages prevented. Over 2,059,067 recreation visits with a local economic impact of more than $34,816,796 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Lewisville Dam, TX

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: Lewisville Dam is located in Denton County on the Elm Fork of the Trinity River, 30 river miles above its confluence with the Trinity River, and 22 miles northwest of the city of Dallas, Texas. The project consists of a rolled earth fill dam, 32,888 feet in length, with a 16-foot diameter flood conduit, controlled by three (6.5-foot x 13-foot) broom-type gates and a 560-foot concrete spillway. Flood control storage capacity is 340,800 acre-feet and conservation/water supply storage is 598,400 acre-feet. Lewisville Dam has twenty-five recreation areas comprising 4,014 acres.

CONFERENCE AMOUNT FOR FY2013: $3,295,000 2/
BUDGET AMOUNT FOR FY 2014: M: $760,000 O: $2,517,000 T: $3,277,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS (by Business Line) FOR FY 2014:

N: N/A

FRM: $1,930,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve the performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include ($180,000) replace flood gate rollers and chains and ($175,000) to replace the deck overlay/paint, repair abutment and install retainers.

RC: $1,103,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $234,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Lewisville Lake has more than $30,877,497,600 in cumulative flood damages prevented. Over 3,129,345 recreation visits with a local economic impact of more than $58,046,229 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Matagorda Ship Channel, TX

AUTHORIZATION: House Document 388, 84th Congress, 2nd Session

LOCATION AND DESCRIPTION: The Matagorda Ship Channel project consists of a 38 feet deep by 300 feet wide entrance channel through a jettied entrance and a 36 feet deep by 200 feet wide main channel that extends 25.2 miles and terminates at a 1,000 feet by 1,000 feet wide turning basin at Point Comfort. The navigation project is located in the vicinities of Port O'Connor, Port Lavaca, and Point Comfort in Matagorda and Calhoun Counties, Texas.

CONFERENCE AMOUNT FOR FY 2013: $4,920,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $5,200,000 O: $0 T: $5,200,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $5,200,000 – Funds will be used for maintenance dredging from Matagorda Point to Point Comfort to project depth ($3,200,000). Funds will also be used to construct Beneficial Use Sites to provide required capacity for out year maintenance ($2,000,000). These funds will improve navigation performance and project reliability.

FRM: NA

RC: NA

H: NA

EN: NA

WS: NA

OTHER INFORMATION: The Matagorda Ship Channel is ranked 54th in the nation with respect to commercial import and export tonnages.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Navarro Mills Lake, TX

AUTHORIZATION: Flood Control Act of 1954

LOCATION AND DESCRIPTION: Navarro Mills Lake is located in Navarro County on Richland Creek, Trinity River Basin, and is 16 miles southwest of the city of Corsicana, Texas. The project consists of an earth fill dam, a controlled spillway using six tainter gates and two conduits controlled by slide gates. Flood storage capacity is 149,200 acre-feet. Six recreation areas comprise 1,195 acres.

CONFERENCE AMOUNT FOR FY 2013: $3,151,000 2/
BUDGET AMOUNT FOR FY 2014: M: $960,000 O: $2,193,000 T: $3,153,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,948,000 - Funds will be used for ciritical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include ($30,000) DIACAP Security requirements for SCADA system for operation of gates remotely, ($50,000) to evaluate load rating for crane required to set stop logs and strengthen bridge to carry loads and ($100,000) to remove woody growth and control vegetation on dam embankment at toe.

RC: $1,108,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $89,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Navarro Mills Lake has more than $84,319,400 in cumulative flood damages prevented. Over 774,874 recreation visits with a local economic impact of more than $7,291,217 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: North San Gabriel Dam and Georgetown Lake, TX

AUTHORIZATION: Flood Control Acts of 1954 and 1962

LOCATION AND DESCRIPTION: The North San Gabriel Dam and Georgetown Lake are located on the North Fork of the San Gabriel River in Williamson County, about 3.5 miles west of the city of Georgetown, Texas. The project consists of a rock fill dam with impervious earth core. Flood control outlet works include two hydraulically operated gates. Conservation/water supply storage is 29,200 acre-feet and flood control storage capacity is 93,700 acre-feet. Five recreation areas comprise 1,638 acres.

CONFERENCE AMOUNT FOR FY2013: $2,303,000 2/
BUDGET AMOUNT FOR FY 2014: M: $541,000 O: $1,730,000 T: $2,271,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,042,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $1,065,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $129,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $35,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: North San Gabriel Dam and Georgetown Lake has more than $15,961,300 in cumulative flood damages prevented. Over 543,187 recreation visits with a local economic impact of more than $8,284,940 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: O. C. Fisher Dam and Lake, TX

AUTHORIZATION: Flood Control Acts of 1941 and 1944

LOCATION AND DESCRIPTION: O. C. Fisher Dam and Lake is located in Tom Green County, on the North Concho River, near the city of San Angelo, Texas. The project consists of an earth embankment, an uncontrolled spillway, gate-controlled intakes, and two flood control conduits. Flood control storage is 276,900 acre-feet and water supply storage is 79,500 acre-feet. Seven recreation areas comprise 4,710 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,011,000 2/
BUDGET AMOUNT FOR FY 2014: M: $498,000 O: $459,000 T: $957,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $842,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include ($25,000) to replace outlet works entrance doors, and ($100,000) to remove woody vegetation along embankment toe.

RC: $57,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $51,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $7,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: O. C. Fisher Lake has more than $21,140,800 in cumulative flood damages prevented. Over 102,377 recreation visits with a local economic impact of more than $1,112,932 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Pat Mayse Lake, TX

AUTHORIZATION: Flood Control Act of 1962

LOCATION AND DESCRIPTION: Pat Mayse Lake is located at river mile 4.6 on Sanders Creek, a tributary of the Red River, about 12 miles north of the town of Paris in Lamar County, Texas. This is a multi-purpose project with flood control, water supply, recreation, and fish and wildlife outputs. The project consists of an 8,780 feet long rolled earth-filled embankment with an uncontrolled spillway. At conservation pool the lake covers 5,940 acres.

CONFERENCE AMOUNT FOR FY 2013: $1,148,000 2/
BUDGET AMOUNT FOR FY 2014: M: $24,000 O: $980,000 T: $1,004,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $509,000 – Funds will be used for routine operations, maintenance, and inspections on structures that reduce flood risk to property and human life, including preventative, routine, and limited breakdown maintenance; operation and inspection of structures to insure projects are performing as designed; and collection of dam safety data.

RC: $437,000 – Funds will be used for routine operations and maintenance activities related to recreation, including ranger patrols; mowing and other service contracts to maintain park and camping areas; utilities; and limited breakdown maintenance.

H: N/A

EN: $50,000 – Funds will be used for routine environmental compliance activities, including monitoring of threatened and endangered species; protection of significant cultural resources; water quality monitoring; natural resources management; invasive species control; public education programs; and NEPA compliance activities.

WS: $8,000 – Funds will be used for monitoring of water usage; management of current water storage agreements; tracking water storage contract billing and payments; renegotiation of expiring water supply agreements; and monitoring of water quality.

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Proctor Lake, TX

AUTHORIZATION: Flood Control Act of 1954

LOCATION AND DESCRIPTION: Proctor Lake is located in Comanche County on the Leon River, about 8 miles northeast of the city of Comanche, Texas. The project consists of an earth fill dam with concrete spillway, which is controlled by eleven tainter gates and two low flow conduits. Flood control storage is 314,800 acre-feet and water supply storage is 60,524 acre-feet. Four recreation areas comprise 1,210 acres.

CONFERENCE AMOUNT FOR FY 2013: $2,454,000 2/
BUDGET AMOUNT FOR FY 2014: M: $509,000 O: $1,929,000 T: $2,438,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,456,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package ($104,000) is to remove woody vegetation from toe of dam.

RC: $904,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $68,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Proctor Lake has more than $82,345,700 in cumulative flood damages prevented. Over 233,419 recreation visits with a local economic impact of more than $2,764,004 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Ray Roberts Lake, TX

AUTHORIZATION: Flood Control Act of 1965

LOCATION AND DESCRIPTION: Ray Roberts Lake is located in Denton, Cook and Grayson Counties, near the city of Denton, Texas. The project consists of an earth fill dam, an uncontrolled spillway, and a gated conduit through the dam with two sluice gates. Flood control storage capacity is 52,400 acre-feet. Ten recreation areas comprise 3,810 acres.

CONFERENCE AMOUNT FOR FY2013: $1,493,000 2/
BUDGET AMOUNT FOR FY 2014: M: $421,000 O: $991,000 T: $1,412,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,249,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package ($103,000) is to repair/expand seepage collector system.

RC: $64,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $89,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Ray Roberts Lake has more than $21,981,318,400 in cumulative flood damages prevented. Over 1,220,758 recreation visits with a local economic impact of more than $14,116,273 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Sabine - Neches Waterway, TX

AUTHORIZATION: House Document 553, 87th Congress, 2nd Session

LOCATION AND DESCRIPTION: The Sabine - Neches Waterway (SNWW) project is a 40 feet deep by 400 feet wide network of navigation channels totaling approximately 97 miles. The project extends from the deep water of the Gulf of Mexico to the port facilities at Port Arthur, the Port of Beaumont (via the Neches River), and the Port of Orange (via the Sabine River). The project is located in the vicinities of Beaumont, Port Arthur, Orange, and Sabine Pass in Jefferson and Orange Counties, Texas, and Cameron and Calcasieu Parishes, Louisiana.

CONFERENCE AMOUNT FOR FY 2013: $19,591,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $15,600,000 O: $450,000 T: $16,050,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $16,050,000 – Funds will be used for maintenance dredging of the following reaches: Sabine-Neches Outer Bar and Bank Channel to project depth ($4,200,000) and advanced maintenance depth ($1,800,000), Port Arthur Canal, Junction & Turning Basin to project depth ($3,800,000) and advanced maintenance depth ($3,000,000), and the Sabine Pass Channel to project depth ($2,000,000) and advanced maintenance depth ($800,000). In addition, funds will be used to perform routine operation and maintenance of the facilities at the Neches River Saltwater Barrier facilities ($450,000). These funds would improve navigation performance and reliability.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The port facilities at Beaumont, Port Arthur and Orange are ranked 4th, 25th and 110th in the nation with respect to commercial import and export tonnage. The SNWW supports a large percentage of the Nation's petrochemical industry and has two Liquefied Natural Gas (LNG) facilities. Unlike other liquid cargo vessels, LNG vessels cannot be lightered and require under-keel clearances between 5-7 feet for safety considerations. The Port of Beaumont is classified as a “Strategic Port” as it is a major outload port for military deployments. Therefore, proper maintenance dredging of the Neches River reach is critical to the support the military mission.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Sam Rayburn Dam and Reservoir, TX

AUTHORIZATION: River and Harbor Acts of 1945 and 1948

LOCATION AND DESCRIPTION: The Sam Rayburn Dam and Reservoir project is located in Angelina, San Augustine, Sabine, Nacogdoches, and Jasper Counties, on the Angelina River, about ten miles northwest of the city of Jasper, Texas. Features of the dam include: an earth embankment, combined concrete power intake and flood control outlet works, a labyrinth weir spillway, and two gate controlled conduits. Flood control storage capacity is 1,099,500 acre-feet, power pool storage is 1,446,500 acre-feet, and water supply storage is 43,000 acre-feet. Twenty-eight recreation areas comprise 3,151 acres. The project contains two 30,000 kW hydropower generation units.

CONFERENCE AMOUNT FOR FY 2013: $5,881,000 2/
BUDGET AMOUNT FOR FY 2014: M: $2,593,000 O: $4,427,000 T: $7,020,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,973,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include ($100,000) to repair piezometers and relief wells located above power pool and ($600,000) to repair erosion along downstream spillway channel.

RC: $1,506,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: $2,800,000 - Funds will be used for critical routine operation and maintenance on hydropower generations and power plant equipment.

EN: $731,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Sam Rayburn Dam and Reservoir has more than $1,230,479,805 in cumulative flood damages prevented. Over 1,677,923 recreation visits with a local economic impact of more than $23,546,849 took place in FY 2010. Additional funds were allocated to the project in FY 2012 to acquire stone for placement below elevation 143.0 to allow additional water supply capacity during drought conditions. Hydropower produced in FY 2012 totaled 27,647 MWh**.**

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Somerville Lake, TX

AUTHORIZATION: Flood Control Act of 1954

LOCATION AND DESCRIPTION: Somerville Lake is located in Burleson, Lee, and Washington Counties on Yegua Creek, about two miles south of the city of Somerville, Texas. The project consists of an earth fill dam, a dike, an uncontrolled spillway, conduit and gated intake. Flood control storage capacity is 347,400 acre-feet and conservation/water supply storage is 158,900 acre-feet. Eleven recreation areas comprise 3,599 acres.

CONFERENCE AMOUNT FOR FY2013: $3,190,000 2/
BUDGET AMOUNT FOR FY 2014: M: $559,000 O: $2,531,000 T: $3,090,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,554,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package ($100,000) is to remove woody vegetation from toe of dam.

RC: $1,340,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $186,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Somerville Lake has more than $189,828,200 in cumulative flood damages prevented. Over 1,162,000 recreation visits with a local economic impact of more than $14,554,290 took place in FY 2010.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT NAME: Stillhouse Hollow Dam, TX

AUTHORIZATION: Flood Control Act of 1954

LOCATION AND DESCRIPTION: Stillhouse Hollow Lake is located in Bell County on the Lampasas River, 16 river miles upstream from its confluence with the Little River, and 5 miles southwest of the city of Belton. The project consists of an earth fill flood control dam, a dike section, and an uncontrolled spillway. Flood control storage capacity is 394,700 acre-feet and conservation/water supply storage is 232,000 acre-feet. Controlled flood releases are accomplished through two hydraulically-operated floodgates. Seven recreation areas comprise 2,089 acres.

CONFERENCE AMOUNT FOR FY2013: $2,040,000 2/
BUDGET AMOUNT FOR FY 2014: M: $295,000 O: $1,718,000 T: $2,013,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $785,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $1,050,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $168,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $10,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Stillhouse Hollow Lake has more than $154,698,300 in cumulative flood damages prevented. Over 283,784 recreation visits with a local economic impact of more than $3,070,518 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Texas City Ship Channel, TX

AUTHORIZATION: House Document 427, 86th Congress, 2nd Session

LOCATION AND DESCRIPTION: The Texas City Ship Channel project is a 45 feet by 400 feet wide by 7.6 miles long channel extending from the intersection with the Houston Ship Channel to the port facilities at Texas City. This project supports the petrochemical industry facilities at the Port of Texas City.

CONFERENCE AMT. FOR FY 2013: $2,234,000 2/
BUDGETED AMOUNT FOR FY 2014: M: $4,300,000 O: $0 T: $4,300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $4,300,000 – Funds will be used to perform maintenance dredging within the Main Channel and Turning Basin to project depth ($2,800,000) and advanced maintenance depth ($1,500,000). These funds will improve navigation performance and project reliability.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: The Port of Texas City is ranked 10th in the nation with respect to commercial import and export tonnage. The project was recently deepened from 40 feet to 45 feet in 2011. As of 2011, the Port of Texas City supports approximately 150,372 jobs, personal income of $6.3M, and business sales of $36.8M. These estimates include direct, indirect and induced income effects of the project.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Texas Water Allocation Assessment

AUTHORIZATION: Flood Control Act of 1970

LOCATION AND DESCRIPTION: The study area includes the state of Texas. The purpose of the study is to identify potential opportunities for the Corps to assist the state in meeting future water needs through immediate technical assistance, and/or through initiation of studies leading to possible implementation of cost-shared water resources projects.

CONFERENCE AMOUNT FOR FY 2013: $100,000 2/
BUDGET AMOUNT FOR FY 2014: M: $0 O: $100,000 T: $100,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: $100,000 - Funds will be used to continue Sulphur River Environmental and Allen's Creek Instream Flow Studies and ensure that the Fort Worth District plays a role in state water planning. In addition, the funds will be used to complete hydrographic studies at two high priority lakes to be coordinated with the Texas Water Development Board (Waco and Whitney). Additional funds would be used for Belton, Stillhouse, Canyon, Sam Rayburn and Ray Roberts to complete hydrographic studies.

OTHER INFORMATION: Studies conducted under the TWAA program include hydrologic and hydraulic modeling, ground- and surface-water modeling, in-stream flow analyses, reservoir system assessments, reservoir yield studies, water-rights analysis modeling, reallocation guidance, basin studies, environmental assessments, hydrographic surveys, and obtaining digital orthophotos and digital elevation models.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Town Bluff Dam, B.A. Steinhagen Lake, TX

AUTHORIZATION: River and Harbor Act of 1945

LOCATION AND DESCRIPTION: Town Bluff Dam, B. A. Steinhagen Lake and the Robert Douglas Willis Hydropower Project are located in Tyler and Jasper Counties, on the Neches River, one-half mile from the city of Town Bluff, Texas. The project consists of an earth fill concrete capped embankment which serves as an uncontrolled spillway. The outlet works is controlled by 6 - 40 foot tainter gates. The lake has ten recreation areas comprising 2,185 acres and two 3,700 kW hydropower generation units.

CONFERENCE AMOUNT FOR FY 2013: $2,769,000 2/
BUDGET AMOUNT FOR FY 2014: M: $1,057,000 O: $2,036,000 T: $3,093,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $1,416,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life.

RC: $562,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: $962,000 - Funds will be used to operate and maintain hydropower generations and power plant equipment.

EN: $153,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: N/A

OTHER INFORMATION: Town Bluff Dam and BA Steinhagen Lake has more than $217,143,495 in cumulative flood damages prevented. Over 23,643,943 recreation visits with a local economic impact of more than $590,061,265 took place in FY 2010. Hydropower produced in FY 2012 totaled 27,000.8 MWh**.**

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Waco Lake, TX

AUTHORIZATION: Flood Control Act of 1954

LOCATION AND DESCRIPTION: Waco Lake is located in McLennan County on the Bosque River, 4.6 miles above its confluence with the Brazos River, and two miles west of Waco, Texas. The project consists of a rolled earth fill dam (24,618 feet long, 140 feet high), spillway (560 feet long), controlled by fourteen (40-foot X 35-foot) tainter gates. One 20-foot diameter conduit in outlet works is controlled by three (6-foot, 8-inch x 20-foot) broom type tractor sluice gates. Flood control storage capacity is 573,300 acre-feet and conservation/ water supply storage is 135,700 acre-feet. Eleven recreation areas comprise 3,599 acres.

CONFERENCE AMOUNT FOR FY 2013: $3,036,000 2/
BUDGET AMOUNT FOR FY 2014: M: $1,255,000 O: $2,149,000 T: $3,404,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,055,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include ($250,000) to dewater stilling basin and repair concrete sections of chute, and ($150,000) to remove woody vegetation from toe of dam.

RC: $1,167,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $170,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $12,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Waco Lake has more than $423,539,400 in cumulative flood damages prevented. Over 1,025,839 recreation visits with a local economic impact of more than $14,493,192 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Wallisville Lake, TX

AUTHORIZATION: River and Harbor Acts of 1945, 1946, and 1962 and the Supplemental Appropriations Act of 1983 (PL 98-63)

LOCATION AND DESCRIPTION: The Wallisville Lake project is a multiple purpose project built on the Trinity River to prevent salinity intrusion and provide water supply, recreation, navigation, and fish and wildlife enhancements. The project includes approximately 8 miles of earthen dam, an overflow spillway with a tainter gate assembly, and an 84 by 600 feet navigation lock with a sill depth of 16 feet for commerce and pleasure craft use.

CONFERENCE AMOUNT FOR FY 2013: $2,482,000 *2/*
BUDGET AMOUNT FOR FY 2014: M: $701,000 O: $1,605,000 T: $2,306,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,306,000 – Funds will be used for labor (district and field) and non-labor field costs for critical routine operation of the project, conducting a study of the river flow, critical routine project maintenance, and implementing the stream gauging and water control bill-back programs. These funds will improve project performance and reliability.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: None.

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: NA

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Whitney Lake, TX

AUTHORIZATION: Flood Control Acts of 1941 and 1944

LOCATION AND DESCRIPTION: Whitney Lake is located in Hill, Bosque and Johnson Counties at river mile 442 on the Brazos River, 5.5 miles southwest of the city of Whitney and 35 miles upstream from the city of Waco, Texas. The project consists of an earthen dam 16,795 feet long. The 894 foot spillway is controlled by 17 40-foot wide tainter gates. The 23,560 acre lake has a flood storage capacity of 1,372,400 acre feet above the normal pool level. The project has thirty-four recreation areas totaling 5,394 acres. The project contains two 17,000 kW hydropower generating units.

CONFERENCE AMOUNT FOR FY 2013: $6,725,000 2/
BUDGET AMOUNT FOR FY 2014: M: $2,689,000 O: $5,868,000 T: $8,557,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $3,248,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance package ($100,000) is to install piezometers in seepage areas and along left downstream abutment.

RC: $1,818,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: $3,070,000 – Funds will be used for critical routine operation and maintenance of hydropower generations and power plant equipment.

EN: $414,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $7,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Whitney Lake has more than $958,087,600 in cumulative flood damages prevented. Over 1,195,394 recreation visits with a local economic impact of more than $15,182,265 took place in FY 2010. Hydropower produced in FY 2012 totaled 24,672 MWh**.**

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Wright Patman Dam and Lake, TX

AUTHORIZATION: Flood Control Act of 1946

LOCATION AND DESCRIPTION: Wright Patman Dam and Lake is located in Cass and Bowie Counties, on the Sulphur River, and is 9 miles southwest of the city of Texarkana. The project consists of an earth fill dam, uncontrolled spillway, two conduits, and four gates. Flood control storage is 2,329,100 acre-feet and water supply storage is 321,900 acre-feet. Twenty-three recreation areas consist of 3,243 acres.

CONFERENCE AMOUNT FOR FY 2013: $3,513,000 2/
BUDGET AMOUNT FOR FY 2014: M: $2,134,000 O: $2,377,000 T: $4,511,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: $2,913,000 - Funds will be used for critical routine operation and maintenance of dams, levees, and other flood risk management structures insuring the project is performing as designed. These funds would improve performance and efficiency by reducing the risk of failure, flooding, and loss of life. Maintenance packages include ($1,040,000) to repair conduits, gates and embedded metals, badly corroded and pitted from cavitations, and ($150,000) to rehabilitate piezometers and relief wells.

RC: $1,270,000 - Funds will be used to operate and maintain parks and other public use areas, including ranger patrols; consolidated service contracts; utilities; and real estate management.

H: N/A

EN: $316,000 - Funds will be used to identify, maintain, and protect natural and cultural resources, including monitoring of threatened and endangered species; water quality monitoring; invasive species control; public education programs; and NEPA compliance activities.

WS: $12,000 - Funds will be used to monitor water usage; manage current water storage agreements; and track water storage contract billing and payments.

OTHER INFORMATION: Wright Patman Dam and Lake has more than $96,602,100 in cumulative flood damages prevented. Over 813,911 recreation visits with a local economic impact of more than $9,315,165 took place in FY 2010.

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Other Business Programs

Regulatory

APPROPRIATION TITLE: Regulatory Program, FY 2014

AUTHORIZATION: Rivers and Harbors Act of 1899, Sections 9 and 10
Clean Water Act, Section 404
Marine Protection, Research and Sanctuaries Act, Section 103

SUMMARIZED FINANCIAL DATA:

Budget Request for Fiscal Year 2014	$200,000,000
President's Budget for Fiscal Year 2013	$205,000,000
Change in FY 2014 from FY 2013	-$ 5,000,000

JUSTIFICATION:

Background. The Corps of Engineers has been regulating specific activities in the Nation's waters since 1899. The Corps' Regulatory program is highly decentralized, with most of the authority for administering the program delegated to District Commanders. There is also a large range in the variability of the types of aquatic resources found in Districts, as well as varying levels of development pressure and the complexity of permit reviews. The Corps' dynamic regulatory program has received more intense interest with the growth of public awareness of the aquatic environment and the state, Federal, and tribal entities' involvement and the increased public and interest group input in the permit application process. This heightened scrutiny may add time to the decision making process, but also provides balance in the overall review. Interagency cooperation in the management and protection of the Nation's aquatic resources has greatly improved over the last ten years, resulting in improved efficiency and effectiveness of the Corps' Regulatory Program. The Corps has worked to implement program changes to enhance decision making, such as establishing procedures and tools to enable more timely responses to permit applicants while also improving protection the aquatic environment. The Corps works with other Federal agencies, states, tribal, and local governments to develop mechanisms that reduce duplication; this is achieved primarily through programmatic and regional general permits. Strategies to eliminate duplication of effort also include joint federal-state permit applications and processing procedures as well as work-sharing agreements with state and local governments. The Corps continues to collaborate with Federal agencies to share information and data to deliver efficient and effective regulatory permit decisions. The 2008 Federal mitigation establishes mitigation requirements procedures and lays out a framework for all Federal agencies involved in the USACE decision-making process to abide by.

Types of Activities Regulated by the Corps:

a. Construction and other work in waters of the United States including wetlands;
b. Construction of fixed structures and artificial islands on the outer continental shelf;
c. Discharges of dredged or fill material into waters of the United States, including wetlands;
d. The transportation of dredged material for the purpose of disposal in ocean waters.

Evaluation Criteria: The decision whether to issue a permit is based on an evaluation of the probable impacts of proposed activities on the aquatic environment, including wetlands, and other aspects of the public interest. In order to issue a permit, District Commanders must determine that activities are not contrary to the public interest. In addition, for Section 404 permits, the Corps must determine compliance with the Clean Water Act, Section 404 (b)(1) guidelines. Corps permits must also comply with other Federal laws, including the Endangered Species Act, National Historic Preservation Act, and address the mandates guiding the Federal government's trust responsibility for Tribes.

ACCOMPLISHMENTS: In FY 2012, the Corps processed approximately 90,000 activities, authorized over 63,000 actions and completed approximately 59,000 jurisdictional determinations. Of these authorizations, approximately 94 percent were authorized by Regional and Nationwide general permits with

the remainder authorized by individual permits.

In FY 2012, the Corps also reissued the Nationwide permits in March of 2012 to include two new Nationwide permits for land based and water based renewable energy projects. The Corps depends on its nationwide permit program to help manage its regulatory workload. Without regional and nationwide general permits, all activities would have to be evaluated by the individual permit process, which is generally considered more complex and time-consuming. Individual permits comprise approximately 6% of all permits in numbers, but account for almost a third of all Corps man-days expended on permit reviews. Environmental review for these individual permits often involves endangered species, historic resources, and compensatory mitigation, making for a time-consuming process. Although the evaluation time for an individual permit is typically greater than that for a general permit, most general permits also involve substantive evaluation and determination of necessary mitigation.

The Corps continues to be a leader in the arena of utilizing technology to support decision making and tracking regulatory actions. In 2012, additional enhancements were made to the ORM2 geospatial database to further standardize data entry, and regulators were provided with standard operating procedures and guidance on data management. This database is essential for collecting and reporting data for all actions including impact, mitigation, and location data, in a consistent manner. The use of geospatial data from internal and external sources is also a component of the ORM2 system, allowing district Regulators to use data and perform analyses in support of the decision making process. As a result, decisions are based on the best available information and science, and are made in a timely manner. The Corps has made ORM2 data available to our USEPA counterparts and provides nightly updates to key permit information. Regulatory continues to maintain an online interactive report that provides the public with a listing of permits associated with all emergencies that require regulatory action. This capability was expanded in 2012 to support the publications of all final Individual permit regulatory actions, and will continue to be expanded to include pending applications, and impact and mitigation data in 2013.

The Corps Regulatory program, with support from the Institute for Water Resources, used a Cumulative Effects Assessment (CEA) framework to develop a CEA methodology for aquatic resource impacts associated with the Appalachian surface mining projects. The methodology includes a review of available literature, acquisition of available land use and ecological GIS (geographic information system) data, development of logic models to characterize the relationships between land uses and aquatic ecosystem effects, and development of a computer interface (“the CEA tool”) with supporting documentation. The Corps based this methodology on the ecological management decision support (EMDS) system, which was originally developed by the U.S. Forest Service to support watershed characterization and decision-making in National Forests. The Corps CEA tool will be used to inform the agency decision maker about the condition of a geographic area. The Corps evaluates the regulated impact in relationship to the past, present and reasonably foreseeable future actions. The CEA tool helps frame a proposed Section 404 action in the context of other activities in the watershed and will be incorporated with other site-specific analyses, including those by the Corps and other agencies. The applicability of this tool will be expanded in 2013, to include additional geographic areas, while an on-going initiative will make this available on a national level by 2014.

In 2012, the Regulatory Program updated and published the National Wetland Plant List, for which it is the Federal lead. Wetland plants are one of three factors used in the 1987 Corps Wetland Delineation Manual; the methodology used to delineate wetlands for purposes of Section 404 of the Clean Water Act. In 2012 the Corps, led by scientists from the Cold Regions Research and Engineering Lab, issued a Federal Register Notice announcing the final updated list after analyzing over 350,000 comments and votes by agencies, academia and the public. The Corps, in cooperation with U.S. Environmental Protection Agency, the U.S. Fish & Wildlife Service and the Natural Resources Conservation Service, also finalized publication of all 10 regional supplements to the 1987 Wetland Delineation Manual to aid in the regional identification of jurisdictional wetlands in the US and US territories. These supplements reflect state-of-the-art science and update the 25-year old wetland delineation manual, while improving the accuracy of wetland delineations based upon regional differences in climate, landforms, geology, soils, hydrologic regimes, and plant/animal distributions. The Corps expanded the Hydrogeomorphic approach for assessing functions of wetland aquatic resources to streams. This comprehensive guidebook provides a science-based stream assessment protocol to evaluate the functions of headwater streams impacted by surface coal mining projects and to support defensible permit and mitigation decisions associated with Corps Regulatory permits. Development of the expansion of the guidebook to other geographic areas and an additional stream type will occur in 2013.

To improve service to the regulated public and stakeholders, the Corps continues to utilize web-based AVATARs and the interactive information systems to assist the public in understanding the Regulatory Program, our mission, and how to obtain permits. This interactive media aims to step the public through the Corps regulatory process and ensure all necessary information is provided with permit applications. The anticipated result is that a greater percentage of permit applications received will have complete and accurate information, reducing the need for Corps staff to spend time and resources requesting additional information. In FY 2013 the Regulatory program will continue to maintain these advancements including required modifications to bring them into compliance with Section 508 of the U.S. Rehabilitation Act.

The Corps continues to protect the Nation's aquatic environment, while working to provide fair and equitable decisions in a timely manner. As development pressure persists or increases, more applicants seek approval to build in or near higher value aquatic areas, including wetlands. Given the complexity of the review and a changing development landscape, more permit decisions—whether issued or denied—are resulting in litigation. The potential for litigation increases the need for more-in-depth review and documentation for complex permits. Court decisions related to Clean Water Act jurisdiction also complicate the permitting process and increase the time needed to provide landowners with decisions, the need for clear guidance, and geospatial decision support tools.

FISCAL YEAR 2014: The FY 2014 request will result in an anticipated flat line of targeted performance and permit execution abilities. Regardless, the Corps will continue to strive to exceed target performance levels and increase the program's level of documentation and consistency necessary for jurisdictional determinations and permit decisions. Pending changes to Clean Water Act guidance and the potential changes to jurisdiction will have an impact on jurisdictional determinations, permit application, and administrative appeal workloads. This projected increase in work may result in additional processing time delays across the program. With reduced staffing levels and potentially increased workloads, the Corps will strive to maintain processing times at or near the current levels for standard permits and general permits. Funds will be allocated for compliance inspections of Corps permitted activities, including critical monitoring of permittee responsible compensatory mitigation. Enforcement and compliance funding collectively will comprise no more than 25% of the request. These funds do not support any additional requirements from the Deepwater Horizon settlements (e.g. RESTORE, NRDA, NFWF, or others) or any other initiatives which do not provide any funding to the Regulatory program which may impact Regulatory workload and performance.

Other program management efforts will continue, including specialized training of Corps personnel and technical assistance to Corps districts by the Engineering Research and Development Center (ERDC) and the Institute for Water Resources (IWR). For FY 2014, approximately $6,500,000 will be allocated to ERDC and IWR for their direct technical, scientific and policy development for complex and sensitive issues, including ORM2 and RIBITS. This funding will also allow ERDC and IWR to continue to provide scientific and technical support for programmatic initiatives including revisions to the Federal regional wetland delineation supplements, develop guidelines for regional assessment methodologies, expansion of the HGM guidebook geography and to include other stream types, and expansion of the Cumulative Impacts Assessment tool nationally. These initiatives will strengthen our decision-making and ensure consistent implementation of the program at a regional level. . Funds will also be applied to ORM2 upgrades and technical advancements for increased data management that support workload statistics and program performance including data for aquatic resource impacts and mitigation. The program will continue to provide funding for currently funded activities that support the Draft National Ocean Policy Implementation Plan.

The $200 million will be applied approximately as follows:

Permit Evaluation and Jurisdictional Determinations	$ 163,600,000
Compliance for Authorized Activities & Mitigation	$ 13,700,000
Enforcement & Resolution	$ 13,700,000
Administrative Appeals	$ 1,300,000
National Initiatives and Technical Support	$ 7,700,000
TOTAL	$ 200,000,000

Formerly Utilized Sites Remedial Action Program (FUSRAP)

APPROPRIATION TITLE: Formerly Utilized Sites Remedial Action Program, Fiscal Year 2014

State Project Name	Allocated through FY 2012	FY 2013 Budget	Total	FY 2014 Request	Remaining Requirement Low Estimate	Remaining Requirement High Estimate
Connecticut						
COMBUSTION ENGINEERING SITE, WINDSOR, CT	9,962,000	5,000	9,967,000	5,000	9,977,000	9,977,000
Iowa						
IOWA ARMY AMMUNNITION PLANT, IA	24,698,000	3,500,000	28,198,000	5,500,000	68,673,000	68,673,000
Maryland						
W.R. GRACE & CO., CURTIS BAY, MD	15,913,000	700,000	16,613,000	800,000	17,293,000	18,293,000
Massachusetts						
SHPACK LANDFILL NORTON, MA	58,795,000	200,000	58,995,000	200,000	74,961,962	74,961,962
Missouri						
LATTY AVE. PROPERTIES, HAZELWOOD, IL	162,689,000	5,000,000	167,689,000	2,000,000	186,836,323	186,836,323
ST. LOUIS AIRPORT SITE VICINITY PROPERTIES, ST. LOUIS, MO	82,181,600	9,900,000	92,081,600	10,500,000	106,957,504	106,957,504
ST. LOUIS AIRPORT SITE, ST. LOUIS, MO	305,867,800	50,000	305,917,800	50,000	308,964,000	308,964,000
ST. LOUIS DOWNTOWN SITE, ST. LOUIS, MO	242,969,400	13,000,000	255,969,400	17,000,000	275,969,400	TBD
New Jersey						
DUPONT & CO., DEEPWATER, NJ	22,837,400	5,000,000	27,837,400	9,000,000	27,837,400	50,897,600
MAYWOOD SITE, MAYWOOD, NJ	567,649,000	28,800,000	596,449,000	34,000,000	930,000,000	940,000,000
MIDDLESEX SAMPLING PLANT, MIDDLESEX, NJ	111,594,000	400,000	111,994,000	400,000	112,059,000	115,059,000
New York						
COLONIE SITE COLONIE, NY	191,264,000	250,000	191,514,000	200,000	193,434,000	202,330,000
FORMER GUTERL SPECIALTY STEEL CORPORATION, LOCKPORT, NY	9,522,650	500,000	10,022,650	500,000	10,664,242	10,664,242
LINDE AIR PRODUCT, TONAWANDA, NY	292,433,056	15,270,000	307,703,056	500,000	309,707,696	309,707,696
NIAGARA FALLS STORAGE SITE, LEWISTOWN, NY	71,829,151	3,600,000	75,429,151	3,600,000	326,236,000	TBD
SEAWAY INDUSTRIAL PARK, TONAWANDA, NY	9,992,000	200,000	10,192,000	200,000	44,230,224	TBD
SYLVANIA CORNING PLANT, HICKSVILLE, NY	20,313,000	1,000,000	21,313,000	1,000,000	TBD	TBD
TONAWANDA LANDFILL, NY	2,496,616	600,000	3,096,616	640,000	4,913,482	4,913,482
Ohio						
FORMER HARSHAW CHEMICAL CO., CLEVELAND OH	17,288,400	500,000	17,788,400	400,000	18,255,551	TBD
LUCKEY SITE, LUCKEY, OH	20,811,105	250,000	21,061,105	3,600,000	265,047,000	265,047,000
Pennsylvania						
SHALLOW LAND DISPOSAL AREA, PARKS TOWNSHIP, ARMSTRONG CO., PA	72,373,786	14,410,000	86,783,786	12,000,000	415,880,007	415,880,007
SUPERIOR STEEL SITE, CARNEGIE, PA	614,300	0	614,300	1,905,000	13,909,754	TBD
Potential Sites	8,597,000	465,000	9,062,000	0	TBD	TBD
Totals	**2,322,691,264**	**99,739,000**	**2,426,291,264**	**104,000,000**	TBD	TBD

CONNECTICUT

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
Combustion Engineering Windsor, CT New England District	9,977,000	9,957,000	5,000	N/A	5,000	5,000	5,000

The Combustion Engineering (CE) site is a 600-acre area in Windsor, Connecticut. CE, under contract to the Atomic Energy Commission (AEC), fabricated nuclear fuel assemblies using highly enriched uranium (HEU) from 1958 to 1961. CE also conducted licensed commercial nuclear activity on the site from the early 1960's to 1993. Although the commercial nuclear fuel fabrication ceased in 1993, CE is still licensed by the Nuclear Regulatory Commission (NRC) for other commercial nuclear activities and the facility is still operating today. HEU is the primary radiological contaminant of concern at the site which may be addressed by Formerly Utilized Sites Remedial Action Program (FUSRAP). Only limited site characterization work had been performed when FUSRAP was transferred from the Department of Energy (DOE) to the Corps for execution. Since then, the Corps has performed a gamma survey of the site, completed site characterization (SI), completed an investigation action at the "Rapaport Building", completed a Remedial Investigation Report and completed a draft Feasibility Study.

CE's NRC license was expanded to cover the FUSRAP waste in FY07. CE will now be responsible for addressing any FUSRAP waste as part of their site decommissioning efforts.

In FY2012 funds were used to continue Corps' monitoring of site activity, support to negotiations with CE and to prepare site close out documents.

In FY2013 we are preparing a no further action decision document.

In FY2014 we will begin the 2-year monitoring period for the site.

**Completion of site remediation by Combustion Engineering in 2013.

IOWA

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014* $
Iowa Army Ammunition Plant Middletown, IA, St. Louis District	68,673,000	21,398,000	3,300,000	N/A	3,500,000	5,500,000	34,975,000

The Iowa Army Ammunition Plant (IAAAP) is a secured, operational, Army-owned facility located on approximately 19,100 acres near Burlington in Des Moines County, in southeastern Iowa. During its use as an Army facility, portions of the IAAAP were occupied by tenant organizations including the Atomic Energy Commission (AEC). From 1947 to 1975, the AEC operated areas of the plant as the Burlington Atomic Energy Commission Plant (BAECP). In 2002 a Preliminary Assessment was completed for the BAECP and the IAAAP was included in FUSRAP. Evidence of a release was found in several areas. Two areas (Line 1 and the Wet Burn Pads South Area) were already investigated under other Army programs and remedial action remained. Other areas at the plant required additional investigation, which was accomplished by USACE as part of a Remedial Investigation. The FUSRAP Remedial Investigation, which was completed in August 2008, identified three areas (the Firing Site area and Yards C and G) for further evaluation in the Feasibility Study. Contamination consisted of radiological depleted uranium (DU). Alternatives to address the DU contamination were presented in the Feasibility Report and a Record of Decision was completed in September 2011. The selected plan consists of (1) the excavation and sorting of DU contaminated soil with offsite shipment to a properly permitted disposal facility and (2) decontamination of structural surfaces in two buildings at Line 1. The primary regulators/stakeholders include the Environmental Protection Agency Region VII, Iowa Departments of Public Health and Natural Resources, Iowa Army Ammunition Plant (Army) and the local residents. The site was placed on the National Priority List in 1990.

FY 2012 funds were used to complete remediation at seven areas along Line 1 and to sample sump and clarifiers at Line 1 under the Army's existing non-radiological Record of Decision. Approximately 5,599 cubic yards of contaminated material were removed. Funds were also used to prepare a draft remedial design for the depleted uranium areas under the 2011 Record of Decision.

FY 2013 funds will be used to complete remediation at the Line 1 area, to complete the design for removal of depleted uranium contamination at the Firing Sites Area and to initiate remedial action at the areas contaminated with depleted uranium. Approximately 2,500 cubic yards of contaminated material will be removed.

FY 2014 funds will be used to continue remediation of the Firing Sites Area. Approximately 2,000 cubic yards of contaminated material will be removed.

MARYLAND

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
W.R. Grace Site Baltimore, MD Baltimore District	17,293,000 18,293,000	15,113,000	800,000	N/A	700,000	800,000	1,256,540 2,256,540

The W.R. GRACE site is situated within a 260-acre property owned by W.R. Grace-Davidson Chemical Manufacturing Company (GRACE) and located in southwestern Baltimore City on an industrialized peninsula. Currently, GRACE manufactures and produces specialty chemicals at this facility. Contamination at the site is located in two separate and distinct areas of concern. The first is located in the southwestern corner of Building 23 which housed the thorium extraction process and has contaminated surfaces which were impacted by this process. The second area is the approximately 7-acre Radioactive Waste Disposal Area (RWDA) located east of the plant proper. This area received the process byproducts and spent monazite sand and gangue from the thorium extraction process. The Department of Energy (DOE) conducted radiological surveys at the site; however, no characterization or remediation had been performed. The Corps has finalized the remedial investigation/feasibility study (RI/FS) and Record of Decision (ROD) for Building 23 and the RWDA. The remedial action for Building 23 is approximately 80% complete.

A Site-Wide Settlement Agreement was signed in 21 April 2008 by the District of Delaware, Bankruptcy Court. The agreement states that financial liability shall be shared between GRACE and the Government in a 40/60 split and giving GRACE the site lead to obtain, manage and direct the site cleanup according to the Records of Decision for each respective area of concern. GRACE is given the right to seek cost reimbursement from the Government, through the Department of Justice Settlement Fund, for those funds spent on the Government's behalf (60%) in conducting the cleanup work.

In FY 2012, the funds were used to to continue to provide technical oversight of GRACE's remedial activities in Building 23 conducted according to the Settlement Agreement.

In FY 2013, funds are being used to complete technical oversight, including a Final Status Survey of Building 23 Remedial Action. Additionally, the Corps will work with Grace to begin oversight of RWDA Remedial Action planning activities conducted according to the Settlement Agreement.

FY 2014 funds will be used to oversee the start of the RWDA Remedial Action work according to the Settlement Agreement.

** The schedule for completion of site remediation is to be determined as USACE as the owner has input on the schedule and contributes to the payment of the costs for the remedial action activities. Currently, USACE anticipates completion of the RWDA remedial action by FY 2018.

MASSACHUSETTS

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
Shpack Landfill Norton/Attleboro, MA New England District	74,961,962	58,295,000	500,000	15,766,962	200,000	200,000	0

The Shpack site is an 8-acre abandoned domestic and industrial landfill which operated from 1946 to 1965. It is located along the Norton/Attleboro town boundary line with approximately 5.5 acres in Norton and 2.5 acres in Attleboro. The Town of Norton and Attleboro Landfill, Inc. owns the property. FUSRAP-related radioactive contamination is believed to have come from Metals and Controls, Inc. (now Texas Instruments), which had used the landfill to dispose of trash and other materials from 1957-1965. The General Plate Division of Metals and Controls began to fabricate enriched uranium foils at their Attleboro plant in 1952. In 1959 it merged with Texas Instruments, which continued the operations until 1981, using enriched and natural uranium for the fabrication of nuclear fuel for the U.S. Navy and commercial customers. The site was also listed on the National Priority List (NPL) in 1986, primarily to address other contaminants on site. The Environmental Protection Agency (EPA) has signed an Administrative Order by Consent with a group of Settling Parties (which includes Texas Instruments) for the performance of a remedial investigation/feasibility study (RI/FS). This study was completed in FY04 and a Record of Decision (which addressed the radiological contamination) was signed on 30 September 2004. The Corps has completed a gamma walk-over survey, site characterization, and potentially responsible party (PRP) investigations and completed a draft Engineering Evaluation/Cost Analysis (EE/CA). In FY 2005, the Corps initiated the remedial action in accordance with EPA's Record of Decision. Quantities of contaminated soil have increased significantly over those in the Record of Decision requiring a significant increase in funding to complete the project

In FY2012 funds were used to complete the remedial action and document the work.

In FY2013 funds are being used to document the work and monitor the site.

In FY2014 funds will be used to complete the 2-year monitoring period for the site.

MISSOURI

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
Latty Avenue Properties / Hazelwood Interim Storage Site Berkeley, MO St. Louis District	186,836,323	159,699,000	2,990,000	N/A	5,000,000	2,000,000	17,147,323

The Latty Avenue Properties site is comprised of several different tracts of land in North St. Louis County, Missouri. The project includes an 11-acre site, encompassing the Hazelwood Interim Storage Site (HISS) and Futura Coatings on Latty Avenue, and the Latty Avenue Vicinity Properties, which are at various nearby locations. The Hazelwood Interim Storage Site and Futura Coatings were placed on the National Priority List in 1989. The primary contaminants of concern are radium-226, thorium-230, and uranium-238. Surface and subsurface soils are known to be contaminated at levels which pose an unacceptable human health risk based on projected future land use scenarios. The primary regulators/stakeholders include the Environmental Protection Agency Region VII, Missouri Department of Natural Resources, and the St. Louis Oversight Committee.

FY 2012 funds were used to complete the sampling and remediation of the Futura building, to perform verification sampling on two vicinity property buildings, to install a long-term monitoring well on the Futura property and to prepare documentation to release four Latty Avenue properties. Approximately 1,496 cubic yards of contaminated soil were shipped.

FY 2013 funds are being used to complete remediation of the VP-1 building, prepare release documents for three properties and to sample the monitoring well.

FY 2014 funds will be used to release the final property, apply institutional controls, and to sample the monitoring well.

MISSOURI

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
St. Louis Airport Site, Vicinity Properties St. Louis, MO St. Louis District	106,957,504	72,591,600	9,590,000	2,000,000	9,900,000	10,500,000	2,375,904

The St. Louis Airport Site (SLAPS) Vicinity Properties consists of 78 properties in North St. Louis County, Missouri. The contaminated sites include former ball fields (located directly north of SLAPS), areas along haul roads, and Coldwater Creek. The primary contaminants of concern are radium-226, thorium-230, and uranium-238. Dispersion of radioactive material occurred by direct migration from SLAPS via air or water, or as a result of transport along the roadways between the St. Louis Airport Site and the HISS/Latty Avenue Site. This is the case for most of the roadway, shoulder, and ditch contamination. The properties are used for residential, commercial, industrial, recreational and transportation (road easement) purposes. The primary regulators/stakeholders include the Environmental Protection Agency, Region VII, Missouri Department of Natural Resources, and the St. Louis Oversight Committee. The Record of Decision for this site was finalized in FY 2005. A Potentially Responsible Party investigation is underway.

American Recovery and Reinvestment Act (ARRA) funds were used in FY 2010 to remediate 5 vicinity properties. The funds were awarded to a small business contractor which removed and shipped approximately 3,100 cubic yards of material and restored the properties to their pre-excavation state. The ARRA funded remediation was completed one month ahead of schedule in August 2010.

FY 2012 funds were used to remove and ship approximately 9,100 cubic yards from the IA-9 Ballfields and Eva Avenue Ditches, to prepare Remedial Designs for the remainder of the Ballfields area, to sample the upstream reach of Coldwater Creek and to complete pre-design sampling on six additional properties. In addition, documentation to return two vicinity properties to beneficial use was prepared.

FY 2013 funds are being used to excavate and ship approximately 5,000 cubic yards from the IA-9 Ballfields area, to sample Coldwater Creek and three other vicinity properties and to prepare documentation to return nine vicinity properties to beneficial use.

FY 2014 funds will be used to excavate and ship approximately 4,400 cubic yards of material, to prepare one Remedial Design, to perform sampling on 4 additional vicinity properties and to prepare documentation to return ten vicinity properties to beneficial use.

MISSOURI

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
St. Louis Airport Site St. Louis, MO St. Louis District	308,964,000	305,817,800	50,000	N/A	50,000	50,000	2,996,200

The St. Louis Airport Site (SLAPS) consists of 21.7 acres north of Lambert International Airport in North St. Louis County, Missouri. The site is bordered by McDonnell Boulevard on the north and east, Coldwater Creek on the west, Banshee Road and Norfolk and Western Railway on the south. The ditches immediately adjacent to the north and south of SLAPS are considered part of this location. The primary contaminants of concern are radium-226, thorium-230, and uranium-238. The St. Louis Airport Authority owns the property. The primary regulators/stakeholders include the U.S. Environmental Protection Agency Region VII, Missouri Department of Natural Resources, and the St. Louis Oversight Committee. A Potentially Responsible Party Investigation is underway. The site was placed on the National Priority List in 1989. In 2008, the Corps completed remediation of this site in accordance with the 2005 Record of Decision.

FY 2012 funds were used to perform groundwater monitoring and long term management activities in accordance with the Record of Decision.

FY 2013 funds are being used to perform groundwater monitoring and long term management activities in accordance with the Record of Decision.

FY 2014 funds will be used to perform groundwater monitoring and long term management activities in accordance with the Record of Decision.

MISSOURI

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
St. Louis Downtown Site St. Louis, MO St. Louis District	275,969,400 TBD	227,149,400	15,820,000	N/A	13,000,000	17,000,000	0 TBD

The St. Louis Downtown Site and vicinity properties are located in St. Louis, Missouri. The site includes an operational chemical manufacturing facility (Mallinckrodt Inc.) and 36 surrounding properties used by a variety of interests for industrial and commercial purposes. The primary contaminants of concern are radium-226, thorium-230, uranium-238, metals, and organic compounds. The extent of contamination includes 17 acres where contaminated soils are accessible for remediation (17 buildings, subsurface soil, and vicinity properties). The primary regulators/stakeholders include the U.S. Environmental Protection Agency Region VII, Missouri Department of Natural Resources, and the St. Louis Oversight Committee. In 1998, a Record of Decision (ROD) for the accessible areas was signed to allow the removal of approximately 87,000 cubic yards of contaminated soils. The total estimated Federal cost shown above does not reflect possible costs of addressing contamination in inaccessible soils. The inaccessible soils remain to be addressed by CERCLA documentation including a Record of Decision.

FY 2012 funds were used to remediate approximately 21,000 cubic yards (from the Plant 6W/Building 101 area, the City Property (east of the levee), and the Plant 7W building 700 pad in accordance with the Record of Decision for accessible areas), to prepare a draft Explanation of Significant Difference to officially include the Building 101 area to the Record of Decision scope, and to issue documents releasing four vicinity properties. In addition, FY 2012 funds were used to issue the final Remedial Investigation Report, and begin preparation of the Feasibility Study Report and Proposed Plan for the inaccessible areas.

FY 2013 funds are being used to remediate approximately 15,000 cubic yards from the Plant 6 West/Building 101 area and the City Property (east of the levee), to issue documentation releasing five vicinity properties in accordance with the Record of Decision for accessible areas and to issue the Feasibility Report, Proposed Plan and Record of Decision for the inaccessible areas.

FY 2014 funds will be used to remediate approximately 17,700 cubic yards from the Plant 6 West/Building 101 area and to release two properties.

The completion schedule will depend on final calculation of the additional costs resulting from addition of the Building 101 area (as detailed in the Explanation of Significant Difference).

NEW JERSEY

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
DuPont Chambers Works Deepwater, NJ Philadelphia District	27,837,400 50,897,600	22,237,400	600,000	N/A	5,000,000	9,000,000	0 21,560,200

The DuPont Chambers Works site is a 700-acre active chemical plant located in Pennsville and Carneys Point Townships on the southeastern shore of the Delaware River, north of the I-295 Delaware Memorial Bridge, and adjacent to the residential community of Deepwater, N.J. The plant is owned and operated by E.I. Dupont de Nemours & Company. Operations involving uranium at the Chambers Works site began in 1942. As part of its work on the Manhattan Engineer District (MED) Program, DuPont worked on developing a process for converting uranium oxide to produce uranium tetraflouride and small quantities of uranium metal. The major contaminant is U-238 found in both soil and water samples. Through FY 2004, the Corps continued site characterization and Remedial Investigation / Feasibility Study (RI/FS) activities for soil contamination and investigation of possible groundwater contamination, conducted Technical Project Planning sessions with the stakeholders including the New Jersey Department of Environmental Protection, held Restoration Advisory Board Meetings, conducted extensive coordination with the landowner, and completed work-plans for on-site investigations and completed soil sampling and well installation. In FY 2010 the Corps completed the Draft Feasibility Study (FS) for Regulator review and comment.

In FY 2012, funds were used to develop the draft and final versions of the Proposed Plan, begin the public comment period, and develop the Draft Record of Decision

In FY 2013, funds are being used to develop the final version of the Record of Decision, develop the engineering design and begin construction activities.

In FY 2014, funds will be used to continue remediation activities at the Site, including excavation, transportation and permanent storage of contaminated material at an approved landfill facility.

The schedule for completion of site remediation is to be determined.**

*The total cost will depend upon the specific cleanup standards established for this site, taking into account input from federal, state, and local regulators, the general public, and other stakeholders. Once a final cleanup plan for the site has been approved in a Record of Decision, it will be possible to provide a more definitive estimate. Current project completion schedules and cost estimates do not include any remedial design or remediation action for potential ground-water contamination.

** The completion schedule will depend on the cleanup standards established for this site.

NEW JERSEY

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
Maywood Site Maywood, N.J. New York District	930,000,000 940,000,000	527,149,000	40,500,000	54,286,000	28,800,000	34,000,000	299,551,000 309,551,000

The Maywood site is included on the Environmental Protection Agency Superfund National Priorities List. The Corps is currently working under the Federal Facilities Agreement (FFA) signed by DOE and EPA. The site consists of 140 acres of residential, commercial and industrial property totaling 88 commercial and residential properties, located 20 miles north of Newark adjacent to Interstate 80 and State Route 17. There are approximately 281,000 cubic yards of subsurface contaminated material containing thorium-232, radium-226, and uranium-238. The United States owns 11.7 acres of the site, which is being used as a staging area during cleanup operations. The Stepan Company occupies part of the site and operates a chemical factory processing a patented product. Sears operates a large central distribution warehouse (leased) on the site. In the mid-1980's, 25 residential vicinity properties were remediated. In 1994 an Engineering Evaluation/Cost Analysis (EE/CA) by the Department of Energy approved a further interim removal action to remediate an additional 39 vicinity properties. As of the end of FY 00, all of the 39 vicinity properties included in the 1994 EE/CA have been remediated, including 23 completed by the Corps (15 in FY 98, 7 in FY99, and 1 in FY00). Additionally, the Corps has completed a Remedial Investigation/Feasibility Study/Proposed Plan, Record of Decision, Remedial Design (RI/FS/PP/ROD/RD) for soils and buildings on the remainder of the site, prepared an EE/CA for an interim removal action involving 10 commercial properties impacted by New Jersey Department of Transportation projects, initiated remedial action for the remainder of soils and completed potentially responsible party (PRP) negotiations through the Department of Justice with the Stepan Company. A complete review of the cost estimate prepared in 2003 has identified inconsistencies with what we presently know. A new cost estimate has been prepared and the funding information above has been revised accordingly.

American Recovery and Reinvestment Act (ARRA) funds were used to excavate the burial pits 1, 2 and other contaminated portions of the Maywood site on the Stepan property.

FY 2012 funds have been used to continue the remedial action under the soils ROD and finalize the groundwater ROD.

FY 2013 funds are being used to continue the remedial action under the soils and groundwater RODs.

FY 2014 funds will be used to continue the remedial action under the soils and groundwater RODs.

**The completion schedule will depend on the groundwater cleanup standards established for this site.

NEW JERSEY

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
Middlesex Sampling Plant Middlesex, NJ New York District	112,059,000 115,059,000	111,194,000	400,000	N/A	400,000	400,000	0 2,665,000

The Middlesex site is a Federal government-owned site located in Middlesex, NJ. There are also 36 Vicinity Properties (VPs). Primary contaminants are Uranium-232, Radium-226, and Thorium-232. The Manhattan Engineer District (MED) established the Middlesex Sampling Plant (MSP) in 1943 for use in sampling, storage, and shipment of uranium, thorium, and beryllium ores. MED operations ended in 1955, and the Atomic Energy Commission (AEC) later used the site for storage and performed limited sampling of thorium residues. In 1967, the AEC terminated activities at the MSP and decontaminated onsite structures to meet criteria then in effect. From 1969 to 1979, the site served as a US Marine Corps training center. In 1980, the MSP was returned to the Department of Energy (as AEC's successor), which designated it for clean up under FUSRAP. MSP was used for interim storage of two piles of radioactively contaminated soils removed from the vicinity properties (VPs) and from the Middlesex Municipal Landfill (MML). The Middlesex site was added to the Environmental Protection Agency Superfund National Priorities List (NPL) in FY 1999. Through the end of FY 2001, the Corps has removed and disposed of the MML pile and the VP pile. Additionally, the Corps has completed a Remedial Investigation/Feasibility Study/Proposed Plan, Record of Decision, Remedial Design (RI/FS/PP, ROD/RD) for soils on the remainder of the site. Coordination with Federal and state agencies, and local communities is continuing.

FY 2012 funds were used to conduct the Groundwater Feasibility Study.

FY 2013 funds are being used to complete the Groundwater Feasibility Study.

FY 2014 funds will be used to complete the Groundwater Proposed Plan.

The schedule for completion of site remediation is to be determined.**

* The total cost will depend upon the specific cleanup standards established for this site, taking into account input from federal, state, and local regulators, the general public, and other stakeholders. Once a final cleanup plan for the site has been approved in a Record of Decision, it will be possible to provide a more definitive estimate.

** The completion schedule will depend on the cleanup standards established for this site.

NEW YORK

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
Colonie Site Colonie, NY New York District	193,434,000 202,330,000	191,014,000	250,000	N/A	250,000	200,000	1,720,000 10,616,000

The Colonie site consists of a total area of 11.2 acres plus 56 vicinity properties (VPs). The primary site was owned and operated by National Lead Industries (NL) from 1937-1984. The facility was used for electroplating and manufacturing various components from uranium and thorium. Radioactive materials released from the plant exhaust stacks spread to site buildings, portions of the grounds, and the 56 commercial and residential VPs. NL also dumped contaminated casting sand into the former Patroon Lake. By order of a New York State Court the NL plant shut down in 1984. Coordination is ongoing with the New York State Department of Environmental Conservation, and local leaders. The transfer of the property from NL to the Federal government in 1984 contained “hold harmless” language, which precludes holding NL as a PRP. At the time of transfer of FUSRAP execution to the Corps, the Department of Energy (DOE) had completed remediation of the vicinity properties; and in 1995 finalized an Engineering Evaluation/ Cost Analysis (EE/CA), authorizing a removal action to address soils contamination at the former NL property itself. Through FY 2002, the Corps disposed, off-site, stockpiled materials and excavated contaminated soils, in accordance with the DOE EE/CA; completed a reevaluation of the DOE EE/CA and issued an amended EE/CA and revised action memorandum; and continued the groundwater investigations. Additionally, the Corps has completed the removal action under the revised Action Memorandum. The Corps completed the Groundwater ROD and commenced the preparation of a Soils Record of Decision.

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FY 2012 funds were used to complete the Soils Proposed Plan and prepare a Soils Record of Decision document. In addition, investigations were performed at 4 properties for dust contamination and a soil removal action was performed at one DOE remediated vicinity property.

FY 2013 funds are being used to complete the Soils Record of Decision and further evaluate dust contamination.

FY2014 funds will be used to address dust contamination in a decision document and commence the transfer back to Department of Energy.

The schedule for completion of site remediation is to be determined.**

* Once a final soils proposed plan for the site has been approved, it will be possible to provide a more definitive estimate.
** The completion schedule will depend on the cleanup standards established for this site.

NEW YORK

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
Guterl Specialty Steel Lockport, NY Buffalo District	10,664,242	8,722,650	800,000	N/A	500,000	500,000	141,592

The former Guterl Specialty Steel site, (a.k.a. Simmonds Saw and Steel Corporation), comprises about 70 acres in the City of Lockport, New York, approximately 20 miles north of Buffalo, New York. The site is bordered by residential and commercial properties to the north, State Route 93 to the west, and the New York State Barge Canal to the south. An active steel plant adjacent to the site is currently being operated by ALLVAC, a business unit of the Allegany Technologies, Inc. Currently, employment is approximately 60 people. The site was used to perform rolling mill operations on about 35-million pounds of uranium metals and 40-thousand pounds of thorium metals between 1948 and 1955 under contracts issued by the Atomic Energy Commission (AEC). The buildings used to support the AEC process encompass about 9 acres, and are abandoned. The site also includes a 9-acre landfill. The USACE is investigating the nature and extent of radiological contamination, and associated human health and ecological risks, resulting from the past AEC operations. The USACE coordinates proposed investigative and remedial activities with the New York State Department of Environmental Conservation, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program.

In FY 2012, funds are being used to continue the FS, and perform annual groundwater sampling and analysis to detect potential contaminant migration.

In FY 2013, funds will be used to finalize the FS and initiate the Proposed Plan, and perform annual groundwater sampling and analysis to detect potential contaminant migration.

In FY 2014, funds will be used to complete the Proposed Plan and initiate the Record of Decision.

* The total estimated federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the Record of Decision (ROD). A preliminary cost estimate for a range of potential long-term site remedies will be developed in the FS.

** The completion schedule for this site will depend on the USACE selection of potential long-term remedies (cleanup standards and technologies) developed for this site in the RI, FS, PP, and ROD.

NEW YORK

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
Linde Air Products Tonawanda, NY Buffalo District	309,707,696	280,433,056	12,000,000	N/A	15,270,000	500,000	1,504,640

The Linde site is located at 135 East Park Drive in the Town of Tonawanda, a suburb north of Buffalo, NY. The site is owned by Praxair Technology Incorporated. The Linde site is a former industrial complex in an urban area that now serves as the worldwide research and development facility for Praxair with approximately 1,400 workers on site. A public elementary school and numerous residential properties adjoin the property. During the 1940s, the Linde Division of the Union Carbide Corporation used portions of the properties for processing of uranium ores in support of the Manhattan Engineering District (MED) activities to develop the nation's first atomic weapons. The USACE is remediating radiological contamination in the soils, buildings, and groundwater under the authority of the FUSRAP and in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The USACE coordinates project activities with the New York State Department of Environmental Conservation, the New York State Department of Health, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

In FY2012, funds are being used to continue the remediation of contaminated soils at the Linde site, including utility replacement.

In FY2013, funds will be used to continue the remediation of contaminated soils at the Linde site.

In FY 2014, funds will be used to initiate project closeout.

* The total estimated Federal cost is increased to include $25,051,000 of USDOE costs not previously included and $106,000,000, estimated by the Corps in its CSRA (Cost-Schedule Risk Analysis), as the 80% confidence cost to complete remedial action at the site. Cost to complete reflects project execution and updated cost to complete via CSRA.

NEW YORK

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
Niagara Falls Storage Site Lewiston, NY Buffalo District	326,236,000 TBD	66,529,151	5,300,000	4,680,549	3,600,000	3,600,000	242,526,300 TBD

The Niagara Falls Storage Site (NFSS) is located at 1397 Pletcher Road in the Town of Lewiston, NY approximately 19 miles north of Buffalo, NY. The NFSS is a 191-acre Federally-owned site with environmental impacts from past activities supporting the nation's early atomic weapons programs under the Manhattan Engineer District (MED) and Atomic Energy Commission (AEC). The site contains a 10-acre Interim Waste Containment Structure (IWCS) built by the US Department of Energy (USDOE) in the 1980s to store high-activity radioactive wastes brought to the site in the 1940s and 1950s. The USACE mission at the NFSS consists of three components. First, the USACE serves as the federal site operator and maintains the facilities and grounds to ensure physical and environmental security. Second, the USACE conducts an environmental surveillance program to ensure that the IWCS is performing as designed and there are no impacts to the environment or public health exceeding federal standards. Third, the USACE is conducting a comprehensive environmental investigation of the IWCS, site soils, groundwater, facilities and infrastructure to evaluate the nature and extent of contamination, the associated human health and ecological risks, and the cleanup alternatives to mitigate risk for long term future land use. The USACE works closely with local, state, and federal law enforcement and homeland security specialists to ensure the site's physical security. The USACE coordinates project activities with the New York State Department of Environmental Conservation, the New York State Department of Health, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

In FY2012 funds were used to complete and publicly release two IWCS Feasibility Study Technical Memoranda (i.e., Radon Assessment and Health Effects from Hypothetical Exposures) to support the NFSS IWCS Feasibility Study. Funds were also used to draft two IWCS Feasibility Study Technical Memoranda (i.e., Remedial Alternatives Technology Development, and Remedial Action Objectives and Applicable and Relevant and Appropriate Requirements (ARARs), drafting the IWCS Feasibility Study Report, execute public information sessions and outreach activities including technical facilitated services, and perform annual environmental surveillance and maintenance activities. Additionally, a contract was awarded to obtain additional Balance of Plant data for the Feasibility Study on this operable unit.

In FY2013, funds will be used to complete and publicly release two IWCS Feasibility Study Technical Memoranda (i.e., Remedial Alternatives Technology Development, and Remedial Action Objectives and Applicable and Relevant and Appropriate Requirements (ARARs). Funds will also be used to develop and finalize the IWCS Feasibility Study Report, execute public information sessions and outreach activities including technical facilitated services, and perform annual environmental surveillance and maintenance activities. Funds may also be used to obtain additional data as warranted by the results of the Balance of Plant data gap investigation.

In FY2014, funds will be used to complete and publicly release the IWCS FS Report, execute public information sessions and outreach activities including technical facilitated services, and perform annual environmental surveillance and maintenance activities. Funds may also be used to initiate development of the Proposed Plan depending on release date of the Feasibility Study in FY2014. Additionally, a contract will be awarded to obtain services for the preparation and development of four technical memoranda and the Feasibility Study report associated with the Balance of Plant Operable Unit.

* The scope of this project includes seven Operable Units (NFSS-IWCS, NFSS Buildings, Infrastructure, Soils [Balance of Plant], NFSS Groundwater, NFSS Off-Site Underground Utilities Impacts, and the Off-Site Vicinity Properties E, E-Prime, and G).

** Updated Federal costs for the NFSS-IWCS is expected to be completed in 2014 with the completion of the IWCS Feasibility Study. The ultimate Federal project cost for closing out all Operable Units will be known upon completion of Records of Decision for all seven Operable Units. Total Federal Cost is To Be Determined (TBD) after the completion of Feasibility Studies for all operable units.

The completion schedule for this site will depend on the USACE selection of potential long-term remedies (cleanup standards and technologies) developed for all Operable Units.

NEW YORK

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
Seaway Site Tonawanda, NY Buffalo District	44,230,224 TBD	9,762,000	230,000	N/A	200,000	200,000	33,838,224 TBD

The Seaway Site is located between River Road and the I-190 expressway in the Town of Tonawanda, 10 miles north of Buffalo, New York. The Seaway Site is owned by Benderson Development Corporation and is a closed commercial landfill of 93-acres. The site is contaminated with radiological wastes, disposed in the landfill by Ashland Oil, which originated from the Linde site approximately 2 miles to the east. During the 1940s the Linde Division of the Union Carbide Corporation processed uranium ores in support of the Manhattan Engineering District (MED) activities to develop the nation's first atomic weapons. At the Seaway Site, approximately 16 acres of the closed landfill are contaminated with radiological waste, including thorium, uranium and radium. There are six areas associated with the Seaway Site; Areas A, B, C, D, Seaway Southside and Seaway Northside. Areas A, B and C are located within the landfill containment system. Cleanup of accessible (i.e., outside of the landfill) Area D soils was included in the Record of Decision (ROD) for the remediation of the Ashland 1 and 2 Sites. During remediation of the adjacent Ashland 1 and 2 Sites contamination was identified outside of the landfill containment system that extends beyond the fence line to the north and south sides of the Seaway Site that is considered as part of the Seaway Site (Seaway Northside and Southside). The Record of Decision for the Seaway Site was signed by the U.S. Army Corps of Engineers in October 2010. The ROD selected Alternative-6 "Containment with Limited Off-Site Disposal" as the long-term remedy for the site. Project activities are coordinated with the New York State Department of Environmental Conservation, the New York State Department of Health, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program.

FY 2012 funds were used to continue preliminary remedial design activities to implement the ROD and support environmental outreach activities.

FY 2013 the Corps continues preliminary remedial design activities, coordinates with stakeholders, and supports environmental outreach activities.

FY 2014 funds will be used to continue remedial design activities and provide stakeholder coordination and environmental outreach services as needed.

NEW YORK

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
Sylvania Corning Plant Hicksville, NY New York District	TBD*	18,313,000	2,000,000	4,500,000	1,000,000	1,000,000	TBD*

The Sylvania Corning Plant (Hicksville) site consists of a total area of 10.5 acres divided into three separate properties located at 70, 100, and 140 Cantiague Rock Road. The Verizon entities, current owners of the 140 and 70 properties and lessees of the 100 property, are the corporate successors to the Atomic Energy Commission's (AEC) contract operator. The facility was used for two distinct but similar operations. The first operation (1952-1965) was under contracts with the AEC for research, development and production primarily in support of the Government's nuclear weapons program. The other operation (1952-1967) was AEC licensed work primarily for the production of reactor fuel, and other reactor core components. Radioactive materials, metals and volatile organic compounds were discharged to the plant sumps, which contaminated site soils and groundwater. Coordination is ongoing with the New York State Department of Environmental Conservation, and Verizon entities. The Site has been included in a regional groundwater listing on the National Priorities List (NPL) in September 2011.

American Recovery and Reinvestment Act (ARRA) funds were used to expedite the remedial investigation of contaminated groundwater at the site.

FY2012 funds were used to continue a Sitewide Feasibility Study.

FY2013 funds are being used to continue the Sitewide Feasibility Study.

FY2014 funds will be used to complete the ongoing Feasibility Study.

*Study costs only, a preliminary cost estimate for site remediation, if necessary, will be determined during the development of the Feasibility Study. The completion schedule will depend on the cleanup standards for the site established in the Record of Decision.

NEW YORK

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
Tonawanda Landfill Vicinity Property Tonawanda, NY Buffalo District	4,913,482	1,796,616	700,000	902,284	600,000	640,000	274,582

The Tonawanda Landfill Vicinity Property is located in the Town of Tonawanda, a suburb north of Buffalo, NY. The Tonawanda Landfill Vicinity Property consists of two separate parcels of property, or Operable Units; the Tonawanda Landfill Operable Unit (OU) and the Mudflats OU, both located about one mile north of the Linde Site. Both Operable Units are owned by the Town of Tonawanda. The Tonawanda Landfill OU was operated as a municipal landfill by the Town of Tonawanda from the 1930s through 1989, and accepted a variety of waste including incinerator ash, sewage sludge, construction debris, municipal waste, and yard waste. The Mudflats OU is a vacant property, apparently used in the past for pasture or agricultural purposes, and most recently used by the Town of Tonawanda for temporary storage of yard waste, mulch, road repair debris, etc. The Town of Tonawanda is currently planning to develop the Mudflats for commercial use. Early investigations by the US Department of Energy (USDOE) found isolated locations at the site contaminated with Formerly Utilized Remedial Action Program (FUSRAP) material. However, no documentation has ever been found indicating the origin of the material or how it was placed at the site. The U.S. Army Corps of Engineers (USACE) completed a Remedial Investigation in 2005, and issued a Proposed Plan for the site in 2007, which recommended No Action for both the Tonawanda Landfill and Mudflats OUs. A No Action Record of Decision was issued for the Mudflats OU in 2008; however, based on public comments received on the Proposed Plan, the Corps decided to conduct additional sampling in the Tonawanda Landfill OU to confirm whether a hazard exists that warrants further action. An updated Baseline Risk Assessment completed in 2012 concluded that while current risks to human health under current site conditions are within the acceptable limits established in the National Oil and Hazardous Substances Pollution Contingency Plan, if the landfill is not maintained risks to future site users could potentially increase above the acceptable limit. Project activities are coordinated with the NY State Department of Environmental Conservation, the NY State Department of Health, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program.

American Recovery and Reinvestment Act (ARRA) funds were used to execute the contract to complete Phase 2 Remedial Investigation sampling in the Tonawanda Landfill OU.

FY 2012 funds were used to complete the Updated Baseline Risk Assessment (BRA) and begin the Feasibility Study.

FY 2013 funds are being used to complete the Feasibility Study.

FY 2014 funds will be used to prepare the Proposed Plan.

* The total estimated federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the Record of Decision (ROD). A preliminary cost estimate for a range of potential long-term site remedies will be developed in the FS.

** The completion schedule for this site will depend on the USACE selection of potential long-term remedies (cleanup standards and technologies) developed for this site in the RI, FS, PP, and ROD.

OHIO

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
Former Harshaw Chemical Company Cleveland, OH Buffalo District	18,255,551 TBD	16,688,400	600,000	N/A	500,000	400,000	67,151 TBD

The former Harshaw Chemical Company site is located at 1000 Harvard Avenue, approximately 3 miles south of downtown Cleveland, OH. The site consists of 12 real estate parcels owned by several owners including BASF Incorporated and Chevron Corporation. The site is approximately 40-acres in size and is located in a predominately industrial setting on the banks of the Cuyahoga River. From 1944 through 1959, the Manhattan Engineering District (MED) and the Atomic Energy Commission (AEC) contracted the Harshaw Chemical Company to process uranium in support of the Nation's early atomic energy program. Various forms of uranium were produced for shipment to Oak Ridge, Tennessee, for isotopic separation and enrichment. In 1960, the site was released for unrestricted use by the AEC, following decontamination efforts by the Harshaw Chemical Company, under the guidance of the AEC. The USACE coordinates project activities with the Ohio Environmental Protection Agency, the Ohio Department of Health, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

In FY 2012, funds were used to complete the Feasibility Study for site-wide soils and groundwater and conduct annual groundwater sampling, testing and reporting.

In FY 2013, funds will be used to prepare the Proposed Plan for site-wide soils and conduct annual groundwater sampling, testing and reporting activities.

In FY 2014, funds will be used to prepare the Record of Decision for site-wide soils and conduct annual groundwater sampling, testing and reporting activities.

* The total estimated federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the Record of Decision (ROD). A preliminary cost estimate for a range of potential long-term site remedies will be developed in the FS.

** The completion schedule for this site will depend on the USACE selection of a preferred remedial alternative with public and stakeholder acceptance.

OHIO

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
Luckey Site Luckey, OH Buffalo District	265,047,000	19,911,105	900,000	1,118,000	250,000	3,600,000	239,267,895

The Luckey Site is located at 21200 Luckey Road near the village of Luckey OH, 22 miles southeast of Toledo. The site is approximately 40-acres in size and is a former magnesium processing facility built in 1942 by the Federal government. The site is currently owned by Abdoo Wrecking, LLC. In 1949, the Atomic Energy Commission (AEC) constructed a beryllium production facility at the site which was operated by private contractors. The waste solutions and sludge from the beryllium production operations were stored in lagoons on the property. Waste solutions were also discharged into Toussaint Creek. In 1951 and 1952, the site operator purchased 1,000 tons of contaminated scrap steel from the Lake Ontario Storage Area in Lewiston, NY. The scrap steel is believed to be the source of the radiological contamination. In 1958, beryllium production operations ceased and in 1961 the Federal General Services Administration transferred the property to private ownership. FUSRAP contamination on site consists of both radiological and chemical wastes. The primary radiological contaminants at the site include radium, uranium and thorium. The primary chemical contaminants at the site are beryllium and lead. The USACE coordinates project activities with the Ohio Environmental Protection Agency, the Ohio Department of Health, the U.S. Environmental Protection Agency and the public through a diverse environmental outreach program.

American Recovery and Reinvestment Act (ARRA) funding was used to complete pre-design field investigations to gather data and further refine the contaminated soil volume estimates which will reduce cost and schedule risk for completing the project.

In FY 2012, funds were used to remove Investigation Derived Waste (IDW) stored on-site, continue remedial design lead-up activities, and conduct annual groundwater sampling, testing and reporting activities.

In FY 2013, funds will be used to develop the acquisition strategy for remedial actions and conduct annual groundwater sampling, testing and reporting activities.

In FY 2014, funds will be used for contract actions required to award a remediation contract, develop remediation work plans, and perform annual groundwater sampling and reporting activities.

PENNSYLVANIA

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
Shallow Land Disposal Area (SLDA) Parks Township, PA Pittsburgh District	415,880,007	63,573,786	8,800,000	N/A	14,410,000	12,000,000	323,506,221

The Shallow Land Disposal Area (SLDA) site encompasses 44-acres of land located in Parks Township, Pennsylvania located about 23 miles northeast of Pittsburgh, Pennsylvania. A nuclear fuel production facility located in Apollo, Pennsylvania generated wastes that were emplaced into a series of 10 trenches at the Shallow Land Disposal Area (SLDA) from the period 1960 to 1970. The contamination is believed to consist primarily of uranium and thorium associated with production of nuclear materials at the Apollo facility. The 10 trenches occupy an area of about 1.2 acres of the 44-acre Shallow Land Disposal Area. The site is currently owned by BWX Technologies. The site had operated under a Nuclear Regulatory Commission (NRC) license that was placed in abeyance by the NRC in August 2011. Any future U. S. Army Corps of Engineers (USACE) activities at the site will be consistent with the Memorandum of Understanding (MOU) between the USACE and the NRC for coordination on cleanup and decommissioning of the FUSRAP sites with NRC-licensed facilities, dated July 5, 2001. This project is being coordinated with Pennsylvania Department of Environmental Protection, Pennsylvania Department of Health and USEPA.

In FY 2013, The Corps completed transportation and disposal of radioactive waste exhumed from 2 trenches and demobilization of the existing contract. Additionally the Corps maintained security at the site, continued with O&M of government facilities and equipment, completed a market survey on the new contract for remedial work, initiated preparation of scope or work for future O&M and security contracts, initiated the preparation of a draft for a ROD Amendment and negotiations on an MOA with NRC and DOE for SLDA specific use.

FY 2014 funds will be used to maintain site security, increase interagency coordination, select new contractors, revise remedial work plans and begin site infrastructure improvements.

FY 2015 funds will be used for mobilization planning, mobilization and initiating remediation action (physical excavation).

PENNSYLVANIA

Site	Total Estimated Federal Cost* $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014** $
Superior Steel Site Scott Township, PA Buffalo District	13,909,754 TBD	614,300	0	N/A	0	3,285,000	11,375,454 TBD

The former Superior Steel Site is located in Scott Township, PA about five miles southwest of downtown Pittsburgh. The Superior Steel Site property is a 25-acre site which has five interconnected warehouse buildings (known as “Building 23”). The site processed uranium metal in support of the Atomic Energy Commission (AEC) fuel element development program between 1952 and 1957. In addition, the site was commercially licensed by the AEC in 1956 to”…receive possession of thorium metal for rolling and cutting” until the license expired in 1958. The AEC operations at the Superior Steel Site resulted in uranium-contaminated building surfaces and subsurface contamination and a collection of investigation-derived waste from a previous remediation by the current site owner, a small manufacturing firm “Superbolt, Incorporated”. The USACE is authorized under the FUSRAP to investigate and respond to AEC contamination at the site. Any residual radioactive contamination resulting from the former commercial processing of thorium metal is not eligible for cleanup by the USACE under FUSRAP. The USACE coordinates proposed investigative and remedial activities with the Pennsylvania Department of Environmental Protection, the U.S. Environmental Protection Agency, and the public through a diverse environmental outreach program.

In FY 2012, no funds are allocated on this project. FY 2011 carryover funds will be used to finalize the SOOH and close out the contract.

In FY 2013, no funds will be allocated on this project.

In FY14, funds will be used to award a contract to initiate a Remedial Investigation.

* The total estimated federal cost reflects a preliminary estimate of costs to complete the study phase of the CERCLA process through the Record of Decision (ROD). A preliminary cost estimate for a range of potential long-term site remedies will be developed in the FS.

** The completion schedule for this site will depend on the USACE selection of potential long-term remedies (cleanup standards and technologies) developed for this site in the RI, FS, PP, and ROD.

APPROPRIATION TITLE: Formerly Utilized Sites Remedial Action Program, Fiscal Year 2014

NATIONAL

Site	Total Estimated Federal Cost $	Allocation Through FY 2011 $	Allocation for FY 2012 $	ARRA Allocation $	Requested FY 2013 Budget $	Requested Allocation FY 2014 $	Additional to Complete After FY 2014 $
Potential Sites / Contingencies	TBD*	8,582,000	15,000	N/A	465,000	0	TBD*

The Department of Energy (DOE) considered several hundred sites in the public and private sectors for the potential for residual radioactive contamination as a consequence of work accomplished in support of nuclear energy technology development that began in the early 1940s by the Manhattan Engineer District (MED). Of these considered sites, a limited number initially were designated for remediation under FUSRAP and the others were eliminated from further consideration at that time. Thereafter, the DOE notifies the Corps of new information changing the status of eliminated sites to that of eligible according to FUSRAP criteria.

FY2002 funds were used to complete preliminary assessments at a number of sites referred by DOE, and if necessary, site inspections or other activities to determine if there is a release or threat of a release of a hazardous substance into the environment that will present an imminent and substantial danger to public health or welfare, and whether the site should be added to FUSRAP as an active site for further study and remediation.

FY2013 funds are being used to start a preliminary assessments at a one sites recently referred by DOE.

FY2014 no funds have been requested at this time. Minor project contingencies will be addressed if funds are available.

*To Be Determined (TBD). Any new sites added to FUSRAP as a result of the preliminary assessment/site inspection performed with these funds will be included in future budgets.

Recreation

O&M Justification Sheet

PROJECT NAME: Budget Management Support for OM Business Programs
Performance Based Budgeting Support Program
Recreation Management Support Program
Stewardship Support Program
Optimization Tools for Navigation (OTN) Program

AUTHORIZATION:
Performance Based Budgeting Support Program: The Government Performance and Results Act of 1993 (GPRA) and under general authorities contained in various laws.

Recreation Management Support Program: This program is conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

Stewardship Support Program: This program is conducted under the authority of ER 1130-2-540, Chapter 7.

Optimization Tools for Navigation (OTN) Program: Efforts are necessary to provide practical quantitative and predictive tools and data for minimizing and optimizing the costs of dredging of Federally-sponsored navigation projects. The objective is to be able to identify more efficient and effective management strategies for existing navigation infrastructure and to improve the analysis of proposals to deepen and widen channels. These efforts will help lead to an improvement of channel design criteria across the Corps, for the U.S. Navy, and other government/academic institutions.

LOCATION AND DESCRIPTION: These are national programs.

CONFERENCE AMOUNT FOR FY 2013: $7,042,000 2/

BUDGETED AMOUNT FOR FY 2014: $7,042,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

ALL: Performance Based Budgeting Support Program. $4,000,000 will provide enhanced continuing support of Civil Works O&M integrated business line information systems; centrally distributed performance measures, outputs and system inventory information; and evaluation of new measures through the Performance Based Budgeting Support Program. FY 2014 funds will also support enhanced development of cross business output-result oriented performance measures of the incremental return on investment in Corps Civil Works program area including the investigation, acquisition and integration of decision-making software. The funding provides enhanced support for all business lines but with an increased focus for flood risk management, water supply, environmental restoration for the data entry modules and integration: The President's management agenda and GPRA requires that the Corps implement performance based budgeting for Civil Works Operations and Maintenance. The Performance Based Budgeting Support Program addresses this requirement by the collection, management and distribution of data; seeking new methods for linking performance to annual budget requests; and for analyzing the potential economic impacts on service to customers of varying budget levels.
a. Civil Works Business Function Information: Provides critical data and information related to Civil Works project inventories, outputs and performance measures; and for the operational and strategic management of Corps' projects, programs, budget development and studies that directly support the Navigation, Hydropower, Recreation, Environment (Stewardship, Compliance, and Restoration), Water

Supply and Flood Risk Management Business Line missions. This information supports the Corps O&M program and is the sole source for the Corps, other Federal agencies, partners, stakeholders, and public. These funds include supporting the collection, database management, integration, standardization, operation, enhancement, quality control, user assistance, training, compliance with security requirements and ACE-IT services. The IT activities are also reported under OMBIL-Plus in ITIPS and the annual OMB 300b submittal accounting for $1,423,741 of the overall OMBIL-Plus costs. Funding for this program increases the Corps' ability to produce efficient, effective, and timely performance measures for budgeting, management and the prioritization of capital investment decisions.

b. Civil Works Performance Measurements: Work includes improvement and integration of business line performance measurements to be incorporated into the budget decision-making process; support for the Office of Management & Budget's performance driven initiatives; and support for the future Corps budget preparation process. Efforts focus on the refinement of corporate performance principles; and program and project level performance measures that focus on anticipated performance and output at different levels of funding. Aligns and integrates with the O&M business processes - navigation, hydropower, flood risk management, recreation, water supply and environment. These measurements, at different organizational levels, provide the analytical basis to identify the incremental return on investment in Corps programs at various funding levels and to make adjustments in priorities both at the program and project levels concerning efficiency of facilities or services. Comparison of across business lines measurements among projects at all levels helps focus management attention on the priorities of programs and projects related to capital investments principles.

c. Civil Works Business Analysis: This task analyzes data using statistical and other analytical techniques and tools to uncover relationships among budget, expenditures and performance within and between Corps business line processes. The relationships and statistics drawn from the data will provide evidence to support capital investment priorities and decisions increasing the Corps ability to delivery business line service in the most efficient and effective manner. This task will also develop effective products to explain relationships found in the data and allow decision-makers to visualize cause and effect. This task links the data gathering, collection and distribution, and use of data in the decision-making process.

N: Optimization Tools for Navigation. $392,000 will be used for the Optimization Tools for Navigation (OTN) Program to continue the deployment and maintenance of the National Navigation Operation & Management Performance Evaluation Assessment System (NNOMPEAS) capabilities and methodology and further its use as a budgeting tool and general project evaluation tool. Funding will also be used (to the extent available) for continued maintenance of the Channel Analysis Design Evaluation Tool (CADET) and development of a vessel lines library to allow use of CADET without proprietary hull line information and to complete technology transfer to USACE so that USACE can independently support general update and maintenance of the algorithms integral to CADET. Funds will also in part be applied in support of continued compilation of dredging cost and quantity data at the channel segment level through implementation of changes to the Resident Management System (RMS) database and to implement changes to NNOMPEAS deemed critical by field analysts to more efficiently facilitate project evaluation and analysis for O&M and new work where applicable.

To maintain the Nation's Federal navigable coastal and inland waterways, nearly 230 million cubic yards of material are dredged in the U.S. annually. In addition, these quantities are likely to increase under proposals for deeper and wider channels to support emerging commercial cargo vessel designs. This initiative will enable the Corps to provide a more credible and informed evaluation of maintenance requirements, based on the economic return. The Corps is developing metrics that would help demonstrate the incremental return-on-investment (ROI) from an increase or decrease of dredging funds and associated maintenance at any specific location. NNOMPEAS is being developed to demonstrate whether such a metric can be provided across all coastal deep-draft harbors and waterways. This tool

uses domestic and foreign trade data to determine and analyze the loaded or immersed drafts and related utilization of vessel cargo-carrying capacity for all recorded cargo vessel calls for individual harbors and channels. The system in turn can provide for the estimation of incremental transportation cost benefits foregone with reduction or absence of maintenance for waterway depth, and of the transportation cost savings with a limited increase in depth. This could offer the potential to optimize maintenance dredging requirements for individual channel reaches and across much of the overall USACE dredging program. A companion tool being developed under the OTN program is CADET, which will allow sophisticated vessel hull modeling not previously available. IWR is conducting this modeling activity jointly with the USACE Engineering Research and Development Center (ERDC) and the U.S. Naval Surface Warfare Center (NAVSEA-Carderoc). CADET will render advanced technologies for methods of analysis and compilation of new physical and numerically-generated data sets descriptive of vessel movement and response within confined waterways and offshore channel areas subject to significant wave climate.

FRM: N/A

RC: Recreation Management Support Program. $1,650,000 will support the implementation of the Recreation Strategic Plan which will guide many of the support activities performed this FY particularly in the areas of efficiency evaluation, communication and partnerships. The Recreation Budget Evaluation System (Rec-BEST) will be refined to increase the capability to monitor and report Recreation performance measures and evaluate and prioritize budget submissions in response to OMB guidance, also to better link with the Asset Management and risk informed budget process. The Recreation module of the Natural Resource Management Gateway will be further developed to address high priority needs. Demonstrations will be conducted to identify and communicate the benefits of the Corps recreation program and improve effectiveness in addressing the needs of ethnic minority visitors. Emphasis will be placed on improving recreation use monitoring procedures that will be incorporated into recreation performance measures. Customer satisfaction survey methods and benchmarking capabilities will be refined and fully integrated into program performance measures. Technical support will be provided to field staff to implement improved procedures. Support will be provided to standing Natural Resource Management (NRM) committees and task forces including: Partnership Advisory Committee, Ranger CoP, Water Safety, Career Development etc. Support will be provided to Headquarters Recreation program staff regarding strategic planning, development of program evaluations, staffing evaluation and other high priority Headquarters initiatives. Provides resources for evaluation tasks associated with the implementation of the National Recreation Program Road Map.

The recreation program serves almost 370 million recreation visitors and generates about $40 million in revenue annually. Visitors spend over $16 billion annually to engage in recreation at Corps projects; over 270,000 full and part time jobs are associated with this spending.

The RMSP supports the recreation program through the conduct of focused management studies to improve operational efficiencies and the provision of technical assistance, to include technology transfer and technology support and maintenance for recreation specific automated information systems. The RMSP supports strategic planning for and performance monitoring of the Corps recreation business program, subject to the Government Performance and Results Act (GPRA).

The RMSP has 3 major components, which together provide comprehensive support to the Corps Recreation Business Program:

1. Focused Management Studies. RMSP provides focused management studies and reports to acquire and analyze information about recreation trends, accessibility, emerging issues, user conflicts, visitor diversity, use fee impacts and similar elements affecting the Corps recreation program. Analyses are

conducted to support the recreation area modernization program, implementing facility and service standards, and in similar product delivery improvement efforts. Information and technology transfer pursuant to these studies is funded by the RMSP. Ongoing trends analysis provides valuable data on which to base decisions about necessary short and long term adjustments to the program to meet public needs.

2. Management/Technical Assistance. RMSP provides technical assistance to the Recreation Community of Practice in the development of management tools, which quantify recreation program outputs and relate them to customer needs and budget allocations for the purpose of measuring performance. This includes gathering and analyzing information about customer satisfaction with the Corps recreation program. RMSP assures the field workforce is equipped with "state-of-the-art" skills and knowledge to deal with a rapidly changing public. RMSP provides technical support and maintenance of performance based budgeting tools, visitation monitoring and analysis systems, fee collection and reporting, economic analysis, facility inventory and condition assessment, and similar automated information programs. RMSP provides short-term assistance to projects in solving specific technical problems.

3. Support to Recreation Program Strategic Planning. Funding to support the activities of the Recreation Leadership Advisory Team (RLAT) is included in this program. The RLAT is composed of representatives from the division, district and project levels of the Corps natural resources management program. It provides input, advice and support to the Corps strategic planning for the recreation business program.

H: N/A

EN: **Stewardship Support Program. $1,000,000** will conduct focused management action studies and recommend guidance to address high priority program efficiency and effectiveness concerns, including responses to new protocols for asset and risk management, regulation changes and administration priorities through the Stewardship Support Program (SSP). Efforts will continue in support of performance based budgeting including further development of performance measures, development of strategies to improve program outputs and outcomes, and refinement of E-S BEST and related guidance to monitor program performance and risk analysis. Progress in recent years on developing standards, published protocols and web-based data entry programs have resulted in improvements in advancing completion of the inventories and will result in expanded data from national GIS analysis to prioritize work during declining or flat budgets. Increased technical support to the field will provide training and guidance to assist in revision to performance measures during 2014, as needed to meet new Civil Works transformation implementation and recent new High Priority Goals of OMB. The SSP will also continue support of the Environment-Stewardship Community of Practice (CoP) including further development of the NRM Gateway for information and technology exchange. These activities will provide benefits in increased program effectiveness through implementation of assessment recommendations. Improved program performance will be facilitated through increased CoP access to best practices and policy guidance, and effective development and execution of performance based budgets.

The Stewardship Support Program (SSP) was established by regulation in FY 02 to provide broad support to Environment-Stewardship function at operating projects by assisting in the identification of national program needs, the development of new national program activities, strategic program planning, and the recommendation of national stewardship program funding priorities. Support will be provided in refining the Environment–Stewardship business program strategic plan and goals, and budget processes, to address the targeted outcomes of the overall Corps CW Strategic Plan, using input from the Stewardship Advisory Team, other associated Corps business programs and stakeholders. Goals and

objectives have been refined, and actions will be identified to achieve them. Funding this program from a single source reflects the nationwide application and supports standardization in program direction and outputs. The program will continue to meet business line needs involved with the Corps Civil Works Transformation, initiating asset management and risk assessment along with additional changes in the administration focus on the America's Great Outdoors (AGO) Initiative and long term sustainability. The SSP supports the Environment–Stewardship program by addressing issues or initiatives that have a broad applicability to many USACE Civil Works projects.

The three basic components of the SSP are:
(1) Focused Management Actions and Studies. These activities are to implement a course of action or practice within field office activities, a region, or nationwide. Examples of management actions might include developing/ assembling an array of management practices for establishing riparian habitat, or creating a forum to share common experiences, build teams, and disseminate information. Examples of management studies might include geospatial tools for use at the projects or conducting studies on management of threatened and endangered species and meeting biological opinion requirements
(2) Policy Guidance and Management Support. Such activities relate to the development and/ or implementation of guidance. Examples of policy guidance included facilitating cooperative agreements with stewardship non-governmental organizations, or amending the annual Budget Engineer Circular to provide emphasis on new environmental threats or nationally significant resources. Mapping stewardship performance and adjusting to more integrated watershed and asset management will be a focus for FY 14. Funding to support the activities of the Stewardship Advisory Team (SAT) is included in this program. The SAT is composed of representatives from the division, district and project levels of the Corps Environmental Stewardship Program. It provides input, advice and support to the Corps strategic planning for the Environment-Stewardship business program.
(3) Information Exchange. These activities are designed to build, integrate, and share our knowledge base to support greater understanding of the environment and the impacts of program work.

WS: N/A

OTHER INFORMATION:

ACCOMPLISHMENTS IN PRIOR YEARS:

Performance Based Budgeting Support Program. Included were newly fielded centralized natural resource, water supply collection system and user's training in OMBIL Plus data entry and access. The One-stop access for much of Civil Works budget performance information was expanded for budget submittals in lieu of separate data calls. An integrated data set for all business lines was created with data for FY1999-2011 providing trend information for analysis. Performance data was merged with P2 for use in the navigation budget development process eliminating data calls and providing nationally standardized information. The inclusion of asset management and capital investment principals were considered.

Recreation Management Support Program. Recent accomplishments include conducting an evaluation of NRM Staffing levels, support for the Recreation Strategic Planning team, development and implementation of a national survey of Park Rangers, refinement of the OMBIL Recreation module and development of platforms to market the CE recreation program on social media websites, (i.e. FaceBook and YouTube). Other past products include Recreation Budget Evaluation System (RecBEST), visitation estimation methodology and data collection and reporting tools, economic impact methodology and analysis tools, customer satisfaction survey and benchmarking tools implemented at all CE projects, studies on recreation preferences of ethnic groups including cross-cultural communication issues, and

support for development of a strategic context as a foundation for transitioning to a performance based environment, to include performance based budgeting. The Natural Resources Management Gateway was developed as a knowledge management tool for the NRM community and is compatible with other Corps KM and Community of Practice initiatives. The Corps Lakes Gateway was developed and provides information to millions of visitors annually on recreation opportunities at Corps projects (in FY10 over 45 million page views). The Corps Lakes Gateway also delivers Corps recreation information to the interagency RecreationOneStop project in support the Administration's E-GOV initiative. Guidance and appropriate tools were developed to improve interpretive services associated with the CE recreation program that advance the public's understanding of the environment and the Corps Environmental Operating Principles. Support to Headquarters was provided to refine the recreation business program strategic plan, utilizing input from the RLAT and stakeholders. Goals and objectives were refined, and actions identified to achieve them. Innovative partnership approaches were developed and field guidance prepared to improve stakeholder participation. Stakeholder outreach was conducted to develop partnerships for strategic initiatives.

Stewardship Support Program. The allocation of project operations and maintenance funds to conduct specified nationwide (multiple project) activities to improve the efficiency and cost effectiveness of the Environment-Stewardship business program has been employed, with subcommittee staff knowledge and concurrence, since the late 1990s for activities similar to those identified for FY 2014. Past products of the Stewardship Support Program include the initial set of Environment-Stewardship program performance measures, which are in accord with the Government Performance and Results Act and used to measure and monitor priority program outputs and outcomes; the Stewardship module of the Operations and Maintenance Business Information Link (OMBIL), which receives and stores selected data concerning the stewardship of project natural resources, and which provides for retrieval of that information by all levels of the Corps; the pilot version and subsequent refinements of the Environment-Stewardship Budget Evaluation System (E-S BEST) used to assist in developing budget scenarios and ranking budget proposals. Components of the Environment–Stewardship portion of the Natural Resources Management (NRM) Gateway, a knowledge management tool for the NRM community, have been completed and others are underway. Support to Headquarters was provided to develop and refine; the Environment-Stewardship business program objectives and budget criteria, the program management plan for the Environment-Stewardship Community of Practice, and the revision of the Environment-Stewardship program regulation. Formulation of program decision tool to evaluate the threats to, and significance of CE managed natural resources was initiated in FY 13 and will continue into FY 14

Optimization Tools for Navigation. Funds in FY 13 will allow maintenance of the core CADET vessel hull modeling effort in conjunction with ERDC with reduced support from NAVSEA-CARDEROC, and the initiation of work and requirements to develop a deep-draft self-propelled vessel lines library. Work will continue on the NNOMPEAS initiative with updating vessel transportation and vessel operating cost data for additional years through the latest year of data availability, increasing or expanding vessel transportation trips and costs to over 115 to 120 coastal harbors nationwide, initial software development to link foreign trade databases with vessel characteristics and vessel movement databases, initiating second-phase modifications to the RMS database for collecting dredging costs and quantities for discrete channel segments, and continued deployment of the modified RMS database through training sessions for coastal District operations staff. Continued(ing) use of NNOMPEAS for further development of efforts to measure incremental transportation costs and benefits, and development of relative rankings based on ROI for major coastal harbors under ongoing initiatives for Value-to-the-Nation (VTN) and for HQUSACE O&M program budgeting input. Currently NNOMPEAS is also being employed for evaluation of vessel calling patterns and supporting load factor analysis (LFA) critical to coastal deep-draft studies, and the evaluation of vessel diversion for offshore wind farm development. Correspondingly, efforts for CADET

will involve deployment and training for use on coastal waterway projects through FY 13 which will support better evaluation of depth needed in offshore environments with simultaneous objectives of minimizing related dredging costs.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT NAME: Cultural Resources (NAGPRA/Curation)

AUTHORIZATION: The Native American Graves Protection and Repatriation Act (NAGPRA), P.L. 101-601, enacted on 16 November 1990 contains data gathering, reporting, consultation, repatriation, and permitting provisions that have near-term and long-term implications for Civil Works programs and projects.

LOCATION AND DESCRIPTION: This nationwide project encompasses all civil work districts with the goal of ensuring USACE compliance with the reporting requirements of NAGPRA and the federal curation regulation, 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections.

CONFERENCE AMOUNT FOR FY2013: $4,500,000 2/

BUDGETED AMOUNT FOR FY2014: $4,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The Native American Graves Protection and Repatriation Act (NAGPRA) addresses the recovery, treatment, and repatriation of Native American and Native Hawaiian cultural items by Federal agencies and museums. As defined by the Act, cultural items are human remains, associated funerary objects, unassociated funerary objects, sacred objects, and objects of cultural patrimony. In FY 1994, the Corps began the process of inventorying human remains and associated funerary objects and completing summaries as mandated by the legislation. In addition, the Corps is responsible for curation of cultural resource materials collected from its water resources development projects. A Mandatory Center of Expertise (MCX), located at the St. Louis District, provides overall management of the Corps NAGPRA programs and serves as an information source and a centralized base for curation compliance and contracting. The MCX will facilitate the assurance of consistent nationwide NAGPRA program implementation and operation. The Corps is responsible for the curation of at least 46,255 cubic feet of artifacts collected from its water resources development projects and at least 3,511 linear feet of associated records. Curation of these materials, the largest volume of all federal agencies responsible for this activity, is required by a number of public laws with implementing guidance in 36 CFR Part 79. Corps collections represent over 80 percent of the total DoD collections. These extensive collections are located in hundreds of curation facilities across the nation. The costs are to accomplish NAGPRA work and to fund MCX curation support to the districts. Associated with efforts to complete NAGPRA and because of the fragile nature of many of the artifact and record collections, the MCX is seeking to accelerate the process of effectively managing the Corps curation effort with a project (i.e., Veterans Curation Project) that provides disabled veterans with training and additional job skills in archaeological collections management, while providing for the rehabilitation of the fragile collections. Funding this item will ensure full USACE compliance with NAGPRA legislation and expedite collection stabilization, proper storage, and curation support to all Districts.

PROPOSED ACTIVITIES FOR FY 2014: The MCX and Corps Commands will continue the process of inventorying Native American and Native Hawaiian human remains and associated funerary objects and complete summaries of unassociated funerary objects, sacred objects, and objects of cultural patrimony as mandated by the legislation. Information will be made available to interested individuals and groups through notices in the Federal Register. Through MCX-provided funding, districts will continue to be engaged in formal consultation with tribes for the legislated purpose of repatriating cultural objects for which there are legitimate claims. The MCX will continue to fulfill its chartered activities in support of other military services and DoD and lead in the implementation of an agency-wide, long-term plan for the curation of USACE archeological collections (heritage assets). The MCX will implement the initial phases of the curation task plan, which involves addressing the rehabilitation needs of USACE's most critical archeological collections and continuing the Veterans Curation Project; however, due to increasing costs, the staffing of veterans and the rehabilitation of at-risk archaeological materials and associated records will be reduced in FY 2014. The MCX will also continue to work closely with USACE commands on the implementation of final guidelines and procedures for field collection of archeological materials and the long-term treatment of those collections. In this regard, the MCX will act as a source of expertise for

processing and rehabilitation of USACE collections. Finally, the MCX will provide leadership in the development of a training curriculum on the treatment of heritage assets and working in consultation with all stakeholders and take initial steps to make this training available to USACE and other appropriate DoD managers and decision makers.

OTHER INFORMATION: A Mandatory Center of Expertise (MCX), located at the St. Louis District, was established to provide overall management of the Corps NAGPRA programs and has served as an information source, a centralized base for curation compliance and contracting. The MCX has facilitated the assurance of consistent nationwide program implementation and operation. The MCX, in providing NAGPRA inventories, has assisted in establishing the extent of Corps holdings. Associated with efforts to complete NAGPRA, the MCX began the process of effectively managing the Corps curation efforts. A phased task plan for curation has been developed and is being implemented on at-risk collections. In addition, the MCX supports and leads the Veteran's Curation Project, whereby disabled veterans receive training in proper identification and curation of artifacts. The project gives them additional qualifications for employment after military service and rehabilitates at-risk archaeological collections.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Fish & Wildlife Operating Fish Hatchery Mitigation

AUTHORIZATION: Public Law 111-85

LOCATION AND DESCRIPTION: This is a recurring national program. In 2008, Congress authorized the U.S. Fish and Wildlife Service (USFWS) to seek reimbursement from the Corps of Engineers for O&M costs incurred by the National Fish Hatchery System for mitigation of certain Corps dam projects which typically predated the National Environmental Policy Act. Subsequent congressional direction as well as concurrence by OMB and ASACW has resulted in a specific line item authorization in the Corps FY10-14 budgets to meet the Corps mitigation requirements.

CONFERENCE AMOUNT FOR FY 2013: $4,300,000 2/

BUDGETED AMOUNT FOR FY 2014: $4,700,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

EN: $4,700,000 The 2014 funding will be transferred to the USFWS for National Fish Hatchery (NFH) for their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams. This amount meets the 100 percent of Corps fish mitigation as determined by 2008 Fish and Wildlife Service estimate.

PREVIOUS YEAR ACCOMPLISHMENTS:

FY 2012: $3,800,000 to be transferred to the USFWS for National Fish Hatchery (NFH) toward their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams.

FY 2013: $3,800,000 transferred to the USFWS for National Fish Hatchery (NFH) toward their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2013 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National (Multiple Project) Natural Resources Management Activities

AUTHORIZATION: This program is conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

LOCATION AND DESCRIPTION: The National (Multiple Project) Natural Resources Management Activities project allows the Corps to allocate a portion of Civil Works projects appropriated funds to conduct certain, specified operations and maintenance activities that benefit all or a majority of operating Civil Works projects. . This approach—which was formalized in FY 2002 appropriations language—allows multiple project activities to be funded as single entities, rather than on a project-by-project basis. This approach is more efficient and cost effective, reducing administration costs and providing for efficient management and oversight. Providing a nationwide funding source at HQUSACE for centralized procurement of these items used by all operating projects having a natural resources management program precludes the need for funds to be transferred by each project or district to a single procurement agent, a savings of from 60 to 300 transactions a year. An example of such an activity is the procurement of park ranger uniforms through a contract administered by the National Park Service.

CONFERENCE AMOUNT FOR FY 2013: $6,530,000 2/

BUDGETED AMOUNT FOR FY 2014: T: $8,673,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

1. Nationwide (Multiple-Project) NRM Activities that will be accomplished with these funds include the following activities:

a. Natural Resources Management Career Development/Training Support and Material Development. Funds are used to address training and career development issues for the Corps' 2,000 Natural Resources Management (NRM) field staff. Staff needs are served through the development of products, such as exportable training courses to meet established training requirements. Funding this as a nationwide activity is appropriate because all NRM field staff benefit equally from the work accomplished.

b. Park Ranger/Manager Uniforms. The Corps purchases uniforms for field personnel through an interagency contract administered by the National Park Service. Funding this as an interagency, nationwide effort reduces administrative costs by eliminating fund transfer requirements from each individual project to the NPS. Since this arrangement was established in 1984, significant economies of scale have been achieved. Costs include the authorized employee allowance funds (including an HQ-approved increase in replacement allowance), NPS contract administration costs, buy out of discontinued items, program management/committee support, and the purchase of required emblems.

c. Printing and Publishing - Printing of forms, brochures, and similar materials—such as Annual Day Use Passes—used by all Corps projects achieves economies of scale and reduces total administrative and procurement costs. Printed materials are stored at the Corps Publications Depot for distribution to all projects upon request.

d. Sign Standards Manual and Software Update and MCX Operation. A Mandatory Center of Expertise provides technical support and assistance to all projects in the operation of the Corps Sign Standards Program, through the maintenance of the Sign Standards Program Manual and software and providing technical assistance to field users. These efforts allow the Corps to maintain a consistent image that we present to the visiting public. Funding this as a nationwide activity assures competent and timely assistance to users, which increases the consistency, effectiveness and efficiency of the sign program.

e. Volunteer Clearinghouse Operation. The Volunteer Clearinghouse is operated under contract with Goodwill Industries to support volunteer efforts at all Corps projects. Use of a single nationwide contract on this achieves economies of scale and reduces administrative costs by eliminating the need to transfer funds from each project.

f. Water Safety Products. The Corps Water Safety National Operating Center produces and distributes water safety products and programs to all Corps projects. Products educate and inform visitors of the dangers associated with water-oriented recreation. Significant economies of scale have been realized through the centralized administration of this program that assures current and critical topics are covered, using effective media targeted to high-risk groups. Drownings and associated lawsuits have been reduced significantly since the implementation of this program in the mid 1980's. Current command emphasis is requiring an even further reduction of fatalities during the next two years.

g. Nationwide Recreation Visitation Surveys. Recreation surveys will be conducted to generate traffic counter load factor data required to reliably monitor visitation at CE managed recreation areas through the Visitation Estimation and Reporting System (VERS). Surveys will be conducted in regions nationwide using teams of interviewers from the Student Conservation Association. Funding this as a nationwide activity enhances quality control, achieves economies of scale through the use of a single contract and reduces administrative costs by eliminating the need to transfer funds from all projects to the single contracting element.

h. Other Nationwide NRM Activities. The following additional NRM Activities are recommended for funding to achieve cost efficiencies at the national level. Challenge Partnership Seed Funds; Critical Incident Stress Management (CISM) Program; Natural Resources Management Awards; Operations CoP Gateway; Partnership Advisory Committee; Property Protection Program; RecBEST Coach, Assist and Train Team; Career Assignment Program for Operations Project Managers; Visitor Center Initiative/Corps Story; and Bilingual Support Team.

N: $0

FRM: $0

RC: $4,980,000

H: $0

EN: $0

WS: $0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

2. Environmental Management System (EMS) Implementation:

Navigation and Flood Reduction Management Projects: The issuance of the latest revision of Engineering Regulation (ER) 200-2-3 in October 2010 expanded the coverage of the USACE EMS to include all Civil Works missions and facilities with significant environmental compliance requirements, and also incorporated Federal statutory and executive order-based sustainability and energy requirements. The USACE organization-wide EMS incorporates existing facility-level EMSs within a single, USACE-wide systematic management framework. In addition to traditional water, air, waste and materials compliance requirements, the USACE EMS includes the energy, water and petroleum efficiency requirements of the Energy Independence and Security Act of 2007 and the Energy Policy Act of 2005, as well as the

sustainable acquisition, electronics stewardship, waste reduction/recycling, and greenhouse gas accounting and reporting requirements of Executive Orders 13423 and 13514. Funding this as a nationwide activity allows USACE to reduce costs and improve performance by implementing standardized compliance and sustainability policies, procedures, and tools for auditing, data management, metrics, reporting, and management review at USACE facilities without transferring funds from each project to a central source.

a. Energy Independence and Security Act (EISA 2007) Section 432 energy and water evaluations (audits) at USACE Covered Facilities ($1.3M Estimated).

b. Energy and sustainability data management, tracking and reporting; energy management technical and contracting support for audits, advanced/enhanced metering, and alternative financing ($1.2M Estimated).

c. Energy Policy Act (EPAct 2005) Section 103 advanced metering for electricity, natural gas and water utilities at USACE Covered Facilities and other facilities that trigger the Federal Energy Management Program advanced metering threshold ($1.1M Estimated).

d. Environmental Compliance and Sustainability (ECS) Career Assignment Program. Covers TDY costs for two, 5-month developmental assignments at HQ USACE supporting USACE Environmental Compliance, EMS and EO 13514 Sustainability requirements ($0.1M Training Estimated).

N: $2,743,000

FRM: $950,000

RC: $0

H: $0

EN: $0

WS: $0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as described above.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Program Development Technical Support

AUTHORIZATION: The automated information system P2 has replaced the Automated Budget System (ABS) for budget development processes. The transition to P2 from ABS has aligned all Civil Works budget requests within one automated information system (AIS). Previously, the ABS supported gathering, analyzing and submitting project funding requests to respond to all authorized missions within the Corps of Engineers Operation and Maintenance program.

LOCATION AND DESCRIPTION: This is program National in scope.

CONFERENCE AMOUNT FOR FY 2013: $300,000 2/

BUDGETED AMOUNT FOR FY 2014: $300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014: Funds will be used to continue to assist civil works program development for budget submissions and identify needed changes and recommend new analytical program development tools and procedures to support civil works program development. P2 provides the program development capability previously provided by ABS. The transition to P2 from ABS for program development began in FY 2007 and continued through FY 2011. Presently work under this activity in current and future years continues to ensure that all relevant business processes and monitoring needs are incorporated into new databases, data requirements continue to be refined, and analytical capabilities are being expanded to support the Corps' budgeting process without creating an undue administrative burden. Changes are being incorporated to support the budget development analytical and reporting needs and to continually refine the system to meet evolving objectives. The deployment of P2 and updated versions has shifted program efforts towards development of methods and procedures for setting program priorities and providing technical support for all civil works activities and analysis across the civil works program. In FY14 this project will continue to assist civil works program development for budget submissions and identify needed changes and recommend new analytical program development tools and procedures to support civil works program development. All business lines benefit from this activity.

N: $75,000

FRM: $78,000

RC: N/A

H: $72,000

EN: $75,000

WS: N/A

OTHER INFORMATION: NA

ACCOMPLISHMENTS IN PRIOR YEARS: Maintained and updated the software systems, provided new tools to generate reports, provided training and support to managers, and enhanced analytical tools to support the budget development process.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Recreation One Stop (R1S)

AUTHORIZATION: These programs are conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

LOCATION AND DESCRIPTION: The Recreation One Stop initiative is to enhance customer satisfaction with recreational experiences on public lands. It improves access to recreation-related information generated by the Federal government, streamlines the systems used to manage that information, and increases the sharing of recreation-related information among government and non-government organizations. At the direction of Office of Management and Budget (OMB), Recreation.gov and Volunteer.gov was combined and is now under the umbrella of Recreation One Stop, a priority E-gov initiative on the President's Management Agenda. Providing a nationwide funding source at HQUSACE for centralized procurement of these items used by all operating projects having a natural resources management program precludes the need for funds to be transferred by each project or district to a single procurement agent, a savings of from 60 to 300 transactions a year.

CONFERENCE AMOUNT FOR FY 2013: $65,000 2/

BUDGETED AMOUNT FOR FY 2014: T: $215,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

Recreation.gov - $200,000 - is an interagency website providing public information about recreation opportunities on federal lands. This website provides a customer friendly recreation portal with information for planning visits to Federal recreation sites and making campground reservations. Required budgeted amount provides payment IAW Interagency Agreement NO.10-1A-11132461-167 between the National Recreation Reservation Service as managed by US Forest Service and Department of Defense. This annual funding supports the Corps responsibility of providing funds for the management and operations costs of the Recreation One-Stop initiative. Recreation.gov provides a customer friendly recreation portal with information for viewing and planning visits on over 4,000 Corps recreation sites and activities, reserve and make payment on line. Recreation.gov provides a customer friendly recreation portal with information for viewing and planning visits on over 4,000 Corps recreation sites and activities, reserve and make payment on line.

Volunteer.gov - $15,000 is an interagency website coordinating volunteer activities among federal agencies. Provides a user-friendly, web based resource to citizens, offering a single point of access to information about volunteer opportunities nationwide. Volunteer.gov is a partner in the White House's USA FreedomCorps Network, and the site is also linked to the Recreation.gov website in which the Corps participates. Required budgeted amount provides payment to Department of Interior (DOI) as the managing partner IAW February 2000 Federal Interagency Team on Volunteerism Memorandum of Understanding. This annual funding supports the Corps responsibility of providing funds for the management and operations costs of the Recreation One-Stop initiative. Volunteer.gov provides a comprehensive clearinghouse of Corps volunteer opportunities. The public can enter geographic information about where they want to get involved and areas of interest to access volunteer opportunities offered by the Corps. Over 55,000 volunteers at Corps projects worked 1.4 million hours, providing $29.7 million value of service in fiscal year 2011.

N: $0

FRM: $0

RC: $215,000

H: $0

Division: HQUSACE District: HQUSACE Recreation One Stop (R1S)

EN: $0

WS: $0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as described above.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Emergency Management

APPROPRIATION TITLE: Flood Control and Coastal Emergencies (FCCE), FY 2014

SUMMARIZED FINANCIAL DATA:

Annual Appropriation FY 2009	$	0
Emergency Supplemental FY2009	$	754,290,000
Annual Appropriation FY 2010	$	0
Emergency Supplemental FY2010	$	20,000,000
Annual Appropriation FY 2011	$	0
Emergency Supplemental FY2011	$	
Annual Appropriation FY 2012	$	27,000,000
Emergency Supplemental FY2012	$	388,000,000
Budget for FY 2013	$	30,000,000
Emergency Supplemental FY2013	$	0
Budget for FY 2014	$	28,000,000

DISASTER PREPAREDNESS**:** The U.S Army Corps of Engineers (USACE) plays an important role in support of the Federal response to natural disasters throughout the United States. Management of FCCE funds ensures mobilization of people and materials, obtaining contractor support, and coordinating with other agencies. It includes coordination and planning with key local, state and federal stakeholders/partners under the under the Corps' statutory authority, PL 84-99, and in support of the National Response Framework with Federal Emergency Management Agency, Department of Homeland Security. It also allows the Corps to purchase and stockpile critical supplies, equipment (i.e. sandbags, pumps) which likely would be otherwise unavailable during the initial response and support of facilities (Emergency Operations Centers.

FISCAL YEAR 2014: The budgeted fund for this program is $28 million. The 2014 budget seeks funding for planning and preparedness activities as part of the regular budget process, instead of relying on emergency supplemental funding.

There had been no annual appropriations from 2004 to 2011. Supplemental appropriations have provided funding for preparedness since 2005, augmented by carryover funds. FY 2013 funds are being used for preparedness activities.

FY 2014 budget of $28 million is a decrease from the latest estimate $30 million presented to Congress (FY2013). These funds provides minimal funding for required training, essential support services and systems, communication systems, contracts renewals to support missions for roofing, water, debris, readiness support, manning of operations centers, stockage of flood-fight equipment and supplies, and inspections of eligible non federal projects. Personnel trained will include Planning and Response teams, Crisis Management teams, Crisis Action teams, and staff for manning of Emergency Operations Centers and Regional Response Coordination Centers. Training and Exercises will include State exercises as Golden Guardian, Makani Pahili, Hurricane Table Top; and Divisions and Districts exercises as flood fighting training and regional all hazard training.

Water Supply

O&M Justification Sheet

PROJECT NAME: National Portfolio Assessment for Reallocations

AUTHORIZATION: Specific project authorizations, Section 216 of the River and Harbor and Flood Control Act of 1970.

LOCATION AND DESCRIPTION: This is a national program.

CONFERENCE AMOUNT FOR FY 2013: $571,000 2/

BUDGETED AMOUNT FOR FY 2014: $571,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN:

WS: **Assessment of Data. $286,000** will be used to finalize the National Portfolio Assessment of Data for Reallocations: Status and Challenges for USACE Reservoirs. The report will leverage data gathered and analyzed as part of the National Portfolio for Reallocations and from other collaborative efforts. Ultimately, the goal of the data assessment includes developing a project by project projection of water supply availability and sustainability over the next 10, 20 and 50 year periods, the ability to roll the developed data up into basin and regional projections which can support watershed based efforts and developing a program to keep the data current.

The National Portfolio Assessment for Reallocations was a two year appraisal, initiated in FY 2008, to develop a portfolio of existing Corps of Engineer multipurpose projects to be used as a screening tool to identify the best candidates for opportunities for operational changes and/or reallocation opportunities. This effort resulted in (1) the development of a portfolio of Corps projects that identified the best candidates for opportunities for operational changes and/or reallocation opportunities to ensure existing Corps reservoirs contribute to enhance economic and ecosystem values as water demands evolve and a better understanding of climate change issues are gained and (2) a paper on alternative funding arrangements for water supply reallocation studies. This report was transmitted to HQUSACE by the Institute for Water Resources in June 2010 and by HQUSACE to the ASA (CW) in August 2010.

During the development of the survey for the National Portfolio Assessment, the Corps was considering two other national surveys, one on the water management aspects of Corps reservoir projects and an other on sedimentation management concerns. USACE leaders recognized that combining these efforts would result in cost and time savings. This combined effort provided not only data for the Portfolio but also created a database to examine the status of Corps water management from local, regional, and national perspectives, an engineering and scientific foundation for a national adaptive management program, a baseline data set for investigating the evolution of operational water management policies, an assessment of sediment infilling, its impacts to operating purposes and management practices, and a database for sediment data collection efforts.

While water and sediment management concerns were originally incorporated to encourage efficiencies between reservoir-oriented data requests, these efforts have proven relevant to the assessment of

reallocation opportunities at multi-purpose reservoirs where any change in operation affects multiple purposes. As a result, after the initial Portfolio Report was completed, this effort was transformed into an Assessment of Data study for FY 2011 and FY 2012 and included the water supply, water management, and sediment management components as well information gained through collaboration with other USACE work efforts.

Sustainable Rivers. $285,000 will be used to advance an ongoing effort to improve practices for evaluating evolving water demands from an environmental perspective. This includes:

- Support the definition of environmental flow needs
- Model application and development
- Implementation of operational changes to meet environmental flow needs
- Monitoring and initiation of a process to revise water control plans

Experiences at existing sites will be used to inform other efforts to modify project operations and refine the practices for evaluating evolving water demands.

The Sustainable Rivers Project (SRP) was initiated in 2002. SRP is an ongoing national partnership between the Corps of Engineers and The Nature Conservancy. The purposes of this effort are to assess ecosystem needs downstream of Corps projects, to evaluate water management opportunities for potential operational changes and/or reallocations to enhance ecosystem values while maintaining or improving primary project purposes (e.g. flood risk reduction, water supply, and hydropower), and to implement environmental flows where feasible.

The SRP involves work on 36 Corps reservoirs in 8 river basins. It is the most large-scale and comprehensive project for implementing environmental flows below Corps reservoirs. Funds from the National Portfolio Assessment for Reallocations (2010-2013) have been instrumental in the advancement of SRP, which has now defined environmental flows for 20 reservoirs and implemented environmental flows at 10, thereby affecting ecological condition for approximately 600 river miles. The Portfolio is currently the only national funding source for the SRP. Full implementation of environmental flows below Corps reservoirs would benefit an estimated 50,000 river miles.

Funding from the Portfolio will be used to support a combination of national level and site specific work. National level work focuses on measuring and communicating the successes of the whole SRP. Site work will define ecological needs, model potential operational changes, and implement and monitor ecological outcomes resulting from changes to the operation of particular reservoir systems. SRP efforts complement the national portfolio assessment by demonstrating that a strategic and science-based adaptive management approach that can be used at Corps projects to maintain or enhance the benefits they provide to the nation. This Sustainable Rivers Project was combined with the National Portfolio Assessment in FY 2010 under the recommended plan.

OTHER INFORMATION:

ACCOMPLISHMENTS IN FY 2013:

The fiscal year 2013 funding of $571,000 was a two-increment effort.

Assessment of Data. Funding in the amount of $286,000 was used to: (a) initiate an effort to complete the compilation of Corps' projects in the Portfolio to include all our projects with irrigation storage. While repayment of irrigation costs are administered by the Bureau of Reclamation, the general physical and operating data of these projects and the knowledge of how these projects operate for irrigation is critical to complete the Portfolio of Corps projects with water supply; and (b) initiate the development of a draft report on the National Portfolio Assessment of Data for Reallocations: Status and Challenges for USACE Reservoirs.

Sustainable Rivers. Funding in the amount of $285,000 was used to continue the efforts of described above to improve practices for evaluation water demands. These efforts included development and

application of models for use at select Corps Sustainable Rivers Project sites, defining environmental flow needs, implementation operational changes to meet environmental flow needs and development of a framework to inform nationwide application of the knowledge gained through the implementation of the Sustainable Rivers Program.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is 0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Expenses

Justification of Estimates for Civil Functions Activities
Department of the Army, Corps of Engineers Fiscal Year 2014
($000)

APPROPRIATION TITLE: Expenses Fiscal Year 14

	FY 2013 Appropriation	FY 2014 Request	Change FY 2013-2014
1. Expenses for Headquarters & Major Subordinate Commands (MSC)			
a. FY 14 Carry In			-0-
b. Headquarters, U.S. Army Corps of Engineers	($ 82,888, 000	$ 82,934,000	$ 46,000
(1) Base level Operating Expenses			
(a) Labor	($ 61,391,000)	($ 61,888,000)	($ 497,000)
(b) Non-labor	($ 20,497,000)	($ 21,046,000)	($ 549,000)
(2) Campaign Plan Activities (formerly Program Acct)	($ 1,000,000)	$	($ 1,000,000)
SUB-TOTAL	$ 82,888,000	$ 82,934,000	$ 46,000
c. Major Subordinate Commands	$ 79,827,000	$ 79,909,000	$ 82,000
(1) Base level Operating Expenses			
(a) Labor	($ 58,972,000)	($ 59,528,000)	($ 556,000)
(b) Non-Labor	($ 20,855,000)	($ 20,381,000)	($ 474,000)
SUB-TOTAL	$ 79,827,000	$ 79,909,000	$ 82,000

	FY 2013 Appropriation	FY 2014 Request	Change FY 2013-2014
2. Administrative Expenses for Field Operating Activities (FOA)			
a. Humphreys Engineer Center Support Activity (HECSA)	$ 6,624,000	$ 6,543,000	$ (81.000)
b. Institute of Water Resources (IWR)	5,294,000	5,280,000	(14.000)
c. U.S. Army Engineer Research & Development Center (ERDC)	300,000	300,000	0
d. USACE Finance Center (UFC)	1,247,000	1,230,000	(17.000)
e. USACE Logistics Activity	3,326,000	3,293,000	(33.000)
f. Army Corps of Engineers – Information Technology (ACE-IT)	2,494,000	2.511,000	(17.000)
SUB-TOTAL	$19,285,000	$ 19,157,000	$ (128,000)
TOTAL	$182,000,000	$182,000,000	$ 0

The Expenses appropriation funds the Executive Direction and Management (ED&M) of the Civil Works responsibilities of the Corps headquarters and division offices, and several field operating activities. The Expenses appropriation funds all operational costs necessary for the supervision and general administration of Civil Works functions in the Headquarters, U.S. Army Corps of Engineers, and eight (8) major subordinate commands. The Expenses appropriation is aligned with all of the National priorities/goals that guide, inform, and shape the civil works program priorities and goals. This account funds the salary/support costs of senior leadership that provides oversight and execution of the mission of the civil works program via five key functions. Expenses Program functions include the following: program management in developing, defending and executing all major Civil Works programs; national and regional coordination with other agencies, states, local governments, and national stakeholders; and quality assurance to ensure that the Civil Works program is executed in a technically sound way in accordance with law, regulation and policy.

a. Command and Control of USACE civil work operations: action by CWP leadership to lead, decide, and direct USACE's CWP operations;
b. Policy and Guidance: action by CWP leadership to develop and issue policy and guidance for USACE's CWP operations in headquarters, regional MSCs, and SFOAs;
c. Program Management: action by CWP leadership to develop, defend, and execute USACE's CWP, including 8 appropriation programs, namely: the Flood Control, Mississippi River and Tributaries (FC,MR&T) Project; Investigations (I) Program; Construction (C) Program; Operation & Maintenance (O&M) Program; Expenses (E) Program; Regulatory Program (RP); Flood Control and Coastal Emergencies (FC&CE) Program; and Formerly Utilized Sites Remedial Action Program (FUSRAP);
d. National Coordination – action by CWP leadership to coordinate with the Administration, other federal and state agencies, national stakeholders, and other interest groups development of USACE's CWP policy and guidance and efficient development, defense, and execution of the CWP; Track and maintain database of more than 80 recurring national events including the Native American (Tribal Nation) Program; Inland Waterways Users Board; National Waterways Conference Budget/Legislative Summit; California Marine Affairs and Navigation Conference

e. Quality Assurance – action by CWP leadership to assure that products of USACE's CWP are of high quality and timely, and executed in strict accordance with law, policy, and guidance.

Principal activities include corporate leadership, strategic planning and performance measurement. Performance measurement is accomplished through performance assessment metrics, construction leading/lagging indicators, and efficiency studies. ED&M also does national coordination and collaboration with other agencies, States, local governments, and non-governmental organizations.

A future challenge is to manage the development of the Civil Works Budget Transformation process. This will force evaluation and establishment of improved performance measures to show the extent in which Corps programs are successful in providing value to the nation through planned efficiency, outputs and outcome performances, rather than the current justification based on asserted resource needs.

The FY 2014 budget for the Expenses program is $184 million. Passback provides $182 million, below ceiling, for this appropriation. The $182 million accurately reflects the Expenses portion of the proposed 30 percent reduction in FY10 travel costs briefed to OMB in September. As per OMB's request, on March 1, 2013, the Corps will provide an update of the unexpended end-of-year balances over the past several years. Funding was held constant in FY10 and FY11 at $185M and declined in FY12 due to Executive Order 13598, "Promoting Efficient Spending".

3. General Administration

The FY 2014 Budget provides for execution at 895 Full Time Equivalents (FTEs) for the U.S. Army Corps of Engineers. The FTEs were validated as a result of a manpower survey conducted by the U.S. Army Manpower and Analysis Agency in April-September 2011. The purpose of the manpower survey was to determine essential staffing requirements for the USACE. USACE implemented the study's organizational changes in November 2011. The FTE are allocated across the Headquarters, Major Subordinate Commands (MSC), and Support Activities.

In direct support of the five functions, FY14 and 15 are focused on improving development of the CWP ED&M Program through redesign of E Program structure, management organization, and processes consistent with: Laws; National priorities, goals, and objectives; The Corps' campaign plan; The CWP's strategic plan; and CWP policy and guidance, In order to maximize benefit of the CWP to the Corps, Army, and Nation, continually. The goal is to describe the program in terms of its two different kinds of work – "routine operations" and "initiatives". The Expenses appropriation pays for:

Routine Operations (work of the CWP ED&M Program that is done, year-in, year-out)
Labor Activities—Civilian--E Program Work/Products or OMA Program Work/Products or Military (E Program, only Work/Products)
Non-labor Activities (E Program, only Work/Products)
Common (Work/Products done by all offices)
Mandatory (Unavoidable short-term), i.e., military pay (uniformed military officers supporting the civil mission), GSA rentals payments, communication (landline telephones); centralized finance, logistics, personnel support; enterprise information technology baseline support and fee for service automated information systems.
Discretionary (Avoidable short-term) i.e., are travel, training, contracts, supplies, printing and office equipment.
Unique (Work/Products done by only some offices)
Mandatory (Unavoidable short-term), seat management, rent, utilities, GUMP, IMIT Service Management, budget printing, customer surveys, travel.

Discretionary (Avoidable short-term) i.e. museum activities, conferences, travel
Initiatives (new work of CWP ED&M Program to be completed within 3 years)
E Program, Only, Work/Products
– Initiative 1,…..Initiative n
E and OMA Programs, Jointly, Work/Products
– Initiative 1……Initiative n
–

The Expenses program executes 65-70% labor and 30% non-labor requirements.

Executive Order 13514, signed October 2009, requires Federal agencies to set a 2020 Greenhouse gas (GHG) emissions reduction target; The Corps established USACE-wide policies, plans, processes, and tools, required to support annual reporting requirements related to GHG.

General administration comprises command and control, policy and guidance formulation, program management in developing, defending and executing all major USACE programs; national and regional coordination level coordination with elements of the Administration, Congress and other agencies and national stakeholders; and quality assurance to ensure that the Civil Works Program is executed in accordance with law, policy and regulation. Execution of the Corps' mission is decentralized across 38 districts, eight (8) MSCs, six field operating activities (FOA), including the Engineering Research and Development Center (ERDC) comprising seven (7) laboratories. The budget will enable the Corps to accomplish its workload, particularly the program and project management, national and regional coordination, and quality assurance functions.

As an organization, the Corps has to transform and evolve to meet changing needs of the nation, and its Armed Forces. As the needs of society and the workforce have changed, Civil Works primary mission of development and management of water resources have changed, to include protection and restoration of water resources and the ecosystems they support. The complexity of water resources development and management requires closer partnerships and greater collaboration. To accomplish the Corps and Civil Works mission, work plans will be developed in accordance with the following priorities:

- Improving program justification statements and program development, defense, and execution as requested by the ASA (CW).
- Improving budgeting and financial performance by reducing carryover and monitoring expenditures.
- Increasing training to retain, maintain and improve technical competence.
- Becoming a more efficient and effective organization through technology (E-government).
- Strengthening dam safety and levee safety and risk management.
- Strengthening business program management for the navigation, environmental restoration and hydropower programs.
- Operate within OMB's imposed 30% travel efficiency..

a. **Headquarters, U.S. Army Corps of Engineers** — **FY 2014 Request**
Base Level Operating Expenses — $ 82,934,000

(1) The Headquarters, U.S. Army Corps of Engineers manages and supervises the execution of civil works programs, including program development, design, planning, project management, engineering, construction, operations and maintenance of Corps projects, regulatory activities, real estate functions and research and development functions. Designation of essential functions and delineation of processes to execute these functions are retained at HQ to ensure consistent customer support across the Corps. The headquarters is also responsible for activities of the Nation's water and related environmental

resources; developing and managing programs; planning, designing, constructing, and operating projects for commercial navigation, flood and storm damage reduction, aquatic ecosystem restoration, and related activities, such as hydropower generation. The headquarters assists the field command by providing command and control, policy formulation, national programs management, national coordination, quality assurance, preparation of the annual budget and legislative submission, national and international interface, resource distribution and oversight of execution, and performance measurement. The Headquarters is also responsible to improve the performance of management functions and to increase the level of effort on management initiatives. In FY2014, Headquarters' will continue to address initiatives as follows:

- Improving planning capabilities through the development and update of planning guidance and training,
- Expanding stakeholder coordination at the regional and national levels,
- Increasing training to retain, maintain and improve technical competence, and
- Managing business process/civil works transformation.

The Expenses appropriation funds the management of the Civil Works eight business lines, i.e., emergency management, environment, hydropower, flood and coastal storm damage reduction, navigation, recreation, regulatory and water supply. The FY2014 amount required for the headquarters consists of the base-level operating expenses of $82,934 for "routine operations". Headquarters has an active program to manage its personnel resources and is responsible for reviewing positions to determine need and priority, consider need for new labor capability and determine which existing labor capability can be "traded out" for needed additional and/or new labor capability. Positions are prioritized and, as opportunities arise, least important positions are eliminated and new positions are created to respond to evolving challenges, such as those in Planning and Policy Division, the Regulatory Program, and Programs Integration Division. Through this prioritization process, headquarters is planning to strengthen its future capabilities in contract management, internal review, program management for development, defense and execution of the Civil Works program, and the execution of project cooperation agreements. Under Government Performance and Results Act (GPRA), each agency is required to establish a Strategic Plan. The Corps' implementation of its Strategic Plan is called the Campaign Plan. The Corps Campaign Plan describes the vision and goals for the entire organization.

(2) Using $182M as a base, the buying power is decreased as a result of inflation due to increases in salary, rent, utilities and information technology. The loss in buying power and funding reductions in FY2014 and FY2015 will negatively impact civil works oversight requirements program as well as maintaining, strengthening, and improving training and technical competences for each employee. In the past, the Corps used recoveries to bridge funding shortfalls. Therefore, in spite of the relatively flat funding levels ($182-$185M) of the last three years, the Corps executed an average of $195M per year in the Expenses appropriation. The use of recoveries were based on our aggressive oversight to clear aged unliquidated obligations. The recoveries balance is fast declining and will cease to exist in the near future.

(3) In FY13, Corps initiated action to transition most activities previously presented as Campaign Plan Activities to routine operations. These formerly known initiatives will be managed as standard HQ functions and will not be grouped with special allocation. Initiatives shown in the Expenses initiative line will based on priority, urgency and sunset of the requirement essential to supporting the Civil Works mission, and benefitting HQ, MSCs and FOAs.

The FY 2014 Headquarters staffing level is 373 civilian FTE. HQ reimburses Department of Army for 34 Expenses funded uniformed military spaces. The Headquarters funding breakout of operational costs by major category is shown below.

$ 61,888,000	Civilian Personnel Compensation and Benefits
21,046,000	Non-labor Costs (routine operations & initiatives)
$ 82,934,000	**Total**

b. **Major Subordinate Commands (MSC)** **FY 2014 Request**

Base Level Operating Expenses $ 79,909,000

Eight division offices (MSCs) of the Civil Works Program provide quality assurance for, and supervise work of 38 district offices that have civil works responsibilities, as well as provide regional coordination with other Federal and non-federal entities. MSCs have the following primary roles:

- Command and Control – executive direction and management (including resource management) of subordinate districts;
- Policy Guidance – development of strategy, policy, and guidance for development, defense, and execution of division-wide programs and projects;
- Program Management – program development to integrate district-wide programs into division-wide programs, program defense of division-wide programs, and execution oversight and analysis of division-wide programs and projects;
- Regional Interface – coordination of issues which cross district boundaries and/or involve regional interests, higher headquarters, state agencies, and regional or higher headquarters of Federal agencies/foreign governments; and
- Quality Assurance – oversight to ensure process and procedures are in place to produce safe, timely, reliable, and cost-effective products and services.

A division headquarters office manages itself and all of its subordinate districts as a single business center, balancing the types of quantities of workload against resources throughout the division's area of responsibility. The organizational structure has been delegated to division commanders and supported by a recent USACE manpower survey. Subordinate commanders have the flexibility necessary to meet customer needs, obtain efficiencies, adjust to resource constraints, and optimize good business practices. MSCs are responsible for program coordination among district offices to ensure efficient and effective program execution, establishment and oversight of technical centers of expertise, and workload and workforce planning. MSCs are responsible for a strong navigation mission, as well as preservation, restoration, and enhancement of environmental resources, including but not limited to, measures for fish and wildlife, increased water supplies, recreation, cultural resources, and other related water resources development programs.. The FY 2014 civilian FTE staffing level for MSCs is 405. HQs reimburses the Department of Army for 18 civil uniformed military positions at MSCs. The civilian FTE level for each MSC varies based upon the scope of their Civil Works responsibilities. Due to an MSC's predominate military workload; They may have between 49 to 63 FTEs, except for Pacific Ocean Division, which has 17 FTE.

$	59,528,000	Civilian Personnel Compensation and Benefits
	20,381,000	Non-labor Costs
$	79,909,000	**Total**

c. **Administrative Expenses for Field Operating Activities** **FY 2014 Request**

Base Level Operating Expenses $19,157,000

Expenses appropriation funds management and operation costs allocable to the civil works program of Corps-wide support facilities. This includes:

- Humphreys Engineer Center Support Activity (HECSA) – This field operating activity of the Corps provided day-to-day operational support services to the Corps; Institute for Water Resources (IWR) – This institute performs studies and analyses on a wide range of water resource issues and develops project planning techniques;

- Engineering Research and Development Center (ERDC) – This center operates several labs and conducts research and development for the Corps and other agencies;
- U.S. Army Corps of Engineers Finance Center (UFC) – This center supports all Corps finance and accounting activities;
- US Army Corps of Engineers Logistics Activity (ULA) This activity provides logistics planning and operations support, supply and maintenance services, facilities maintenance services, transportation services, and regional logistics liaisons to USACE commands and activities in order to provide supply and service support across the full spectrum of operations. The Expense appropriation funds 30 FTE to oversee these operations;
- Corps of Engineers – Information Technology (ACE-IT), ACE-IT (Army Corps of Engineers - Information technology) was selected as the IM/IT service provider for the U.S. Army Corps of Engineers as part of the USACE A-76 competitive sourcing initiative. The ACE- IT team is comprised of USACE Government staff, providing mission-assured services, along with Lockheed Martin staff. ACE-IT is the provider of Information Management/Information Technology (IM/IT) support for USACE. The ACE-IT mission provides enterprise-wide IM/IT services for all information management functional areas to include Automation, Communication, Information Assurance, Records Management, Printing & Publications, and Visual Information. These services include local support activities, as well as enterprise services, such as centralized AIS hosting, long-haul communications, e-mail support, service desk, and information assurance services. The Expense appropriation funds 15 FTE to oversee the services provided by ACE-IT. The FOAs have a total of 120 civilian (no uniformed military positions) FTE.

$	15,207,000	Civilian Personnel Compensation and Benefits
	3,950,000	Non-labor Costs
$	19,157,000	**Total**

4. **Account Summary:**

	HQ	MSC	FOA	TOTAL
Civilian Personnel Compensation and Benefits	$ 61,888,000	59,528,000	15,207,000	$136,623,000
Non-labor Costs	21,046,000	20,381,000	3,950,000	45,377,000
TOTAL	$ 82,934,000	79,909,000	19,157,000	$ 182,000,000

a. Headquarters

FY2014 Request
$82,934,000

The FY 2014 Headquarters staffing level is 385 civilian FTE. HQs reimburses Department of Army for 34 expense funded uniformed military spaces. The Headquarters breakout of operational costs by major category is shown below.

$	61,888,000	Civilian Personnel Compensation and Benefits
	16,644,000	Fixed Costs
	(10,686,000)	(Rent, utilities, AIS, communication, critical support services, etc.)
	(5,958,000)	(Reimbursement to Department of Army for Uniform Military salaries)
	4,402,000	Variable Costs (Transportation, printing, travel, training, supplies and equipment)
$	82,934,000	**Total**

b. Major Subordinate Commands (MSC)

	FY 2014 Request
	$ 79,909,000

Eight MSC provide command and control, program management, regional coordination, quality assurance and technical oversight of subordinate district offices. In addition, MSCs are responsible for program coordination among district offices to ensure efficient and effective program execution, establishment and oversight of technical centers of expertise, and workload and workforce planning. MSC are responsible for a strong navigation mission, as well as preservation, restoration, and enhancement of environmental resources, including but not limited to measures for fish and wildlife, increased water supplies, recreation, cultural resources, and other related water resources development programs. The FY 2014 civilian FTE staffing level for MSCs is 405. HQs' reimburses Department of Army for 18 civil uniformed military positions. The civilian FTE level for each MSC varies based upon the scope of their Civil Works responsibilities. MSCs may have between 49 to 63 FTEs, except for Pacific Ocean Division, which has 17 FTE.

$	59,528,000	Civilian Personnel Compensation and Benefits
	15,879,000	Fixed Costs
	(12,020,000)	(Rent, utilities, training, travel, communication, critical support services, etc.)
	(3.859,000)	(Reimbursement to Department of Army for Uniform Military salaries)
	4,502,000	Variable Costs (Transportation, printing, training, travel, supplies and equipment, and admin support from districts)
$	79,909,000	**Total**

5. **Account Summary:**

	HQ	MSC	FOA	TOTAL
			FY 2014	
Civilian Personnel Compensation and Benefits	$ 61,888,000	$59,528,000	$15,207,000	$136.623,000
Fixed Costs	16,644,000	15,879,000	2,664,000	35,187,000
(Rent, utilities, communication, critical support services, etc.)	(10,686,000)	12,020,000)	0	(22,706,000)
(Reimbursement to Department of Army for Uniform Military salaries)	(5,958,000)	(3,859,000)	0	(9,817,000)
Variable Costs(Transportation, travel and training, supplies, district services	4,402,000	4.502,000	1,286,000	10,191,000
Campaign Plan Activities (transferred into routine operations, variable)				
TOTAL	$ 82,934,000	$79,909,000	$ 19,157,000	$182,000,000

Assistant Secretary of the Army

(Civil Works)

Justification of Estimate for Civil Functions Activities
Department of the Army, Corps of Engineers
Fiscal Year 2014
($000)

APPROPRIATION TITLE: Office of the Assistant Secretary of the Army (Civil Works)

	FY 2013 Budget	FY 2014 Budget	Change FY 2013-2014
Policy Direction and Oversight	$ 5,000,000	$5,000,000	0

JUSTIFICATION:

In accordance with 10 USC 3016(b)(3), the Assistant Secretary of Army for Civil Works (ASA (CW)), has the principal responsibility for overall policy direction and supervision of Department of the Army (DA) functions relating to all aspects of the Civil Works Program, including all reimbursable work performed by the U.S. Army Corps of Engineers (USACE) on behalf of Federal and non-Federal entities.

Specific responsibilities of the ASA (CW), assigned by statute and/or Army General Orders, include the following:

A. Managing and supervising the DA Civil Works Program, including:

1. Developing, defending, and directing the execution of DA Civil Works policy, legislative activities, and financial programs and budget.

2. Developing policy and guidance for, and administering the DA regulatory program to protect, restore, and maintain the waters of the United States in the interest of the environment, navigation, and national defense, pursuant to the Rivers and Harbors Appropriations Act of 1899, the Federal Water Pollution Control Act (Clean Water Act), as amended, and the Marine Protection Research and Sanctuaries Act of 1972.

3. Developing the DA position on USACE civil works studies and projects, including coordination with OMB under E.O. 12322, and transmission of the Secretary's recommendations to Congress.

4. Serving as congressional liaison on civil works matters, including serving as the DA point of contact for House and Senate Authorization and Appropriations Committees charged with oversight of the DA Civil Works Program.

B. Overseeing the development, coordination, and implementation of policy for USACE programs in support of other Federal and non-Federal entities, except those activities that are exclusively in support of U.S. military forces.

C. The OASA-CW also, in coordination with the Army's Deputy Chief of Staff, G-3, develops policy for and directing the foreign activities of the USACE, except for those foreign activities that are exclusively in support of U.S. military forces overseas.

DESCRIPTION:

The budgeted amount will be used to finance costs sub-allocated to the Office of the ASA (CW) by the Department of the Army, including the costs of 23 full time equivalent work years, and indirect and overhead costs consistent with those funded in recent appropriations.

SUMMARIZED FINANCIAL DATA:

	FY 2014
Personnel Compensation and Benefits (fully fund authorized staff to accomplish mission)	$ 3,500,000
Support Services (space, utilities, communications, ADP, etc.)	$ 1,100,000
Other (travel, transportation, training, printing, supplies and equipment)	$ 400,000
Total FY 2014 amount:	$ 5,000,000

Revolving Fund - Plant Replacement and Improvement Program (PRIP)

APPROPRIATION TITLE: Revolving Fund- Plant Replacement and Improvement Program (PRIP)

1. Explanation of Revolving Fund. The Revolving Fund, established by Congress in 1953 (P.L. 83-153, 67 Stat. 199), replaced the Plant Allotment Account authorized by the Secretary of War, on 13 December 1934, which had in turn replaced the Plant Program - Appropriation Basis that was used prior to 1934. Prior to the establishment of the Revolving Fund, accounting procedures necessitated by the two previous systems were cumbersome and resulted in a distorted picture of costs when plant was 2603transferred from one appropriation to another.

a. Essentially, P.L. 83-153 provided that the Revolving Fund assumed the total capital value of $127.9 million in 1953, consisting of the unexpended cash balance ($25.3 million) and the net value ($102.6 million) of the assets and liabilities of the plant accounts. The Revolving Fund would finance all future services as a separate entity within its own resources. The Plant Replacement and Improvement Program of the Revolving Fund (PRIP), has proven to be an effective means of providing equipment and materials needed on more than one project. Some advantages of the system are that it: (1) Simplifies funding and accounting procedures; (2) Provides consideration for plant replacement costs and inflation; (3) Eliminates distorted project costs when plant is used on multiple projects throughout its economic life; and (4) Permits plant availability on a timely basis to meet requirements.

b. The Revolving Fund operates within its own resources rather than from recurring annual appropriations. The Fund owns land, structures, dredges, floating plant, aircraft, fixed and mobile land plant, tools, office furniture, special equipment, computers and automated systems, which serve two or more projects or appropriation accounts. In order for the Revolving Fund to acquire and replace assets, plant or equipment items, it is necessary that the user, project, or appropriation be charged a fee when equipment or services are consumed. This fee consists of operating and fixed costs. The operating costs are reimbursed without a surcharge. The fixed costs include straight-line depreciation and a PRIP surcharge to provide for price growth and inflation. When planned expenditures exceed the income producing capability of the Fund, additional direct appropriations are required.

c. When the Revolving Fund was established, Congress authorized a capital fund limitation or ceiling of $140.0 million. The capital fund value or corpus consists of the total assets, less liabilities and reserves. The initial corpus ceiling was adequate until 1965, when rising workload and inflation forced the Corps of Engineers to begin Budgeting annual increases of the corpus. These requests were generally granted, because the ceiling limited the income generating capability, which in turn, adversely affected the overall management of the Fund. Therefore, the Corps recommended and Congress granted the request in FY 1979, that annual capital-expenditure ceilings be substituted for the corpus ceiling. Then in FY 1985, expenditure ceilings were replaced by expenditure estimates. Starting in FY 1994, the Corps replaced the estimate of expenditures with an estimate of obligations in accordance with recommendations by the General Accounting Office.

2. The Revolving Fund accounts for facilities, payroll, and operations throughout the Army Corps of Engineers at its divisions, districts, separate field offices, and laboratories including its Engineer Research and Development Centers like the Waterways Experiment Station. The fund incurs expenses for acquisition, rehabilitation, operation, and maintenance of multiple use structures such as warehouses, shops and garages, as well as general-purpose plant, such as dredges, tugs, launches, trucks, cranes, bulldozers, drill rigs and other construction equipment. It also provides for reimbursement of the general and administrative expenses of District offices.

3. The FY 2014 PRIP includes 1 New Major Item and 29 Continuing Major Items from FY 2013. 2 Continuing Major Items have revised cost estimates greater than twenty percent above the original estimated cost. The tables that follow provide cost estimates for the New Major Items and revised cost estimates for the Continuing Major Items with increases in excess of twenty percent from the original cost estimate.

APPROPRIATION TITLE: Revolving Fund- Plant Replacement and Improvement Program (PRIP)

FY 2014 New Major Items	Page	Total Estimated Cost ($000)
1. Remove and Replace Docks A and B – U.S. Moorings (Portland District)	4	11, 325
		Total: 11,325

Continuing Major Items with Revised Cost Estimates in Excess of 20%	Page	Original Estimated Cost ($000)	Previous Estimated Cost ($000)	Revised Estimated Cost ($000)	Total Cost Increase ($000)
1. A&B To Information Technology Lab Bldg 8000	3	27,500	33,600	35,100	1,500
2. P2: Corps of Engineers Programs & Project Management System	8	29,945	34,270	37,324	3,054

PRIP Category	Page
Land and Structures	3
Dredges	4
Other Floating and Mobile Land Plant	6
Fixed Land Plant and Automated Systems	7

4. FY 2013 and FY 2014 (Items costing $5,000,000 or more)

Of the 29 items listed below, 11 are scheduled for completion with FY 2013 funding and 2 are scheduled for completion in FY 2014.

a. Land and Structures:

(1) Additions and Betterment to Information Technology Lab – Engineer Research and Development Center (Continuing). Additions and betterments are needed to expand the Information Technology Lab (ITL) to accommodate a new Department of Defense purchased supercomputer. The Engineer Research and Development Center (ERDC) examined all of its requirements for computer acquisitions in the next five years in order to determine the new building requirements. Along with the building expansion, extensive increases in power and cooling requirements are included in the project. The design of the addition to the facility will also allow employees who currently work in adjoining trailers to move into the building. Total estimated cost: $35,100,000. Prior years: $33,600,000. FY 2013: 1,500,000. Cost increase was due to contractor being terminated for default and as a result, additional funds will be needed to cover additional contract inspections, administrative costs and provide some contingency since the liquidated damages are not available to the Government at this time. Congressional authorization to use PRIP funds to construct a new Environmental Laboratory and provide improvements to the Information Technology Laboratory was provided in Section 107 of the Consolidated Appropriations Act, 2008 (Public Law 110-161).

(2) New Engineer Research and Development Center (ERDC) Headquarters Building (Continuing). ERDC Headquarters, Command Staff Division, and assembly facilities are currently housed in five separate facilities that are aging and energy-inefficient. The current buildings do not comply with "Green standards" set by the Leadership in Energy and Environmental Design (LEED) Certification Program or anti-terrorism standards and some buildings contain asbestos. The proposed facility would replace several buildings and would provide office, meeting, training, reception, technical support, and quality of life space for ERDC headquarters and administrative personnel and tenant organizations in a modernized facility that complies with DoD minimum antiterrorism standards for buildings. The new facility would increase productivity, reduce operating costs, improve morale and synergy among the staff, enhance force protection, and promote efficiency and enhanced management control through co-location of functions and personnel currently located in a number of widely separated buildings on the 700-acre Vicksburg installation. Preliminary estimates are that approximately 120,000 square feet would be sufficient to replace the current approximately 169,000 square feet in five separate outmoded buildings. Funding in FY 14/15 predicated on the result of the design. Total estimated cost: $47,000,000. Prior Years: $340,000. FY 2013: $3,660,000. FY 2014: $43,000,000.

(**3) Service Base Mooring Replacement, Pile Clusters, MDC 2768, St Louis District (Continuing).** This project addresses safety, environmental conditions and mission requirements associated with the St. Louis District mooring facility due to the failure of four out of twelve wood pile clusters and the compromised southern mooring fleet area. The scope of work includes design and replacement of the piling system, removal of the existing pilings and replacing the trestle. The piling system supports the mooring facility at Mississippi River Mile 276. Currently, the southern wood pile clusters have failed and fleet barges are resting against a minimal number of remaining wood pile clusters. The replacement of the pile system will provide the St. Louis District fleet with mooring facilities designed to meet Coast Guard and marine safety criteria. Total estimated cost: $19,000,000. Prior year: $14,566,300 FY 2013: $3,000. Contingency Reserve: $4,430,700

(4) Huntington District Federal Building Upgrade, Huntington District (Continuing). The Huntington District Federal Building is currently scheduled to undergo GSA ARRA funded renovations starting in FY 2010. During these renovations, Huntington District will make improvements to the building in order to meet Department of Defense minimum antiterrorism standards for buildings, and improve work environments to accommodate the recent increase in staffing. The work will consist of tenant improvements such as replacement of interior walls, ceiling, floor finishes, and carpet. More efficient floor layouts will be constructed as well. Security upgrades will include reinforcement of walls and windows, and structural retrofit for progressive collapse. Total estimated cost: $21,000,000. Prior Years: $20,703,754. FY 2013: $125,000. FY 2014: $97,000. Future Years: $74,246 to complete.

(5) Remove and Replace Docks A and B – U.S. Moorings - Portland District (New). The U.S. Government moorings facility, Docks A and B has been in existence since 1903 to provide berthing during the winter repair period for minimum fleet hopper dredges ESSAYONS and YAQUINA. The last major refurbishment of the docks was in 1964. Since then, the dock surfaces have been re-decked and shear piles replaced periodically due to normal wear and tear. The stringers have rotted and several pile cap timbers have extensive dry rot up to four feet back from the exposed ends. As a result, a project increase is required for removal of the docks instead of refurbishing them. This will allow the cleanup of the sediment in the way of docks by GASCO, design, removal and installation of the decking once clean-up is complete. Total estimated cost: $11,325,000. FY 2013: $4,200,000. FY 2014: $675,000. Future Years: $6,450,000.

(6) Maintenance Bulkheads, CELRL, Louisville, KY (Continuing). The maintenance bulkheads used at the Louisville District's Ohio River projects are averaging 30 to 40 years old. These bulkheads are fabricated from aluminum and are riveted and bolted together. Of the 16 bulkheads, the district has 4 out of service and not considered worth repairing due to corrosion and unavailability of the original material. Six other bulkheads were repaired and re-inspected during the winter of 2009. They will be re-inspected in 2012. Varying levels of corrosion are present on all the bulkheads. To de-water a lock chamber for maintenance requires 6 bulkheads on the downstream end and up to 5 on the upstream end. This only leaves one bulkhead in reserve. Without new bulkheads if any more are placed out of service the ability of LRS to accomplish its dewatering mission is compromised. Total estimated cost: $8,200,000. FY 2013: $4,200,000. FY 2014: $4,000,000 to complete.

b. Dredges:

(1) Dredge YAQUINA Repowering – MDC Project 2507 Portland District (Continuing). The dredge YAQUINA entered service in 1981. It is based in Portland, Oregon, and is part of the Corps hopper dredge fleet. The dredge operates on the West Coast to maintain Federal navigation channels. The main engines and ancillary systems have been in continuous service for twenty nine years. The main engines are no longer manufactured and it is becoming increasingly difficult to locate and procure replacement parts. Replacement of the main engines and ancillary systems is required in order to assure continued operation of the vessel. In addition, due to the ever increasing stringent emission standards, the engines should be replaced with more efficient marine diesels. Total estimated cost: $18,211,000. Prior Years: $15,520,961. FY 2013: $75,000. FY 2014: $10,000. Future Years: $2,555,039.

(2) Dredge YAQUINA Dredging System Improvement MDC Project 2727 – Portland District (Continuing). The dredge YAQUINA entered service in 1981. It is based in Portland, Oregon, and is part of the Corps hopper dredge fleet. The dredge operates on the West Coast to maintain Federal navigation channels. The dredge pump engines, reduction gears, dredge pumps, hopper distribution system, and ancillary systems have been in continuous service for twenty eight years. The dredge pump engines are no longer manufactured and have been rebuilt several times. It is becoming increasingly difficult to locate and procure replacement parts. Replacement of the dredge pump engines and ancillary systems is required in order to assure continued operation of the vessel. The hopper distribution system is dated and will require redesign in order to maximize the settling and loading times from the new engine and more efficient dredge pump combinations. In addition, due to the ever increasing stringent emission standards, the engines should be replaced with more efficient marine diesels**.** Total estimated cost: $9,176,000. Prior Years: $4,755,528. FY 2013: $50,000. Contingency Reserve: 4,370,472.

(3) Dredge POTTER Flexible Discharge – MDC Project 2717 St. Louis District (Continuing). This project entails the purchase of a flexible discharge floating pipeline, a spill and store barge, and handling gear for the Dredge POTTER. The new floating pipeline will provide the ability to better perform

environmental dredging on the Mississippi River. Environmental dredging requires the use of fixed point discharge equipment in order to place dredged materials in specific locations to build beaches, islands, and underwater islands. Total estimated cost: $8,000,000. Prior Years: $6,790,800. FY 2013: $500,000. Contingency Reserve: $709,200.

(4) Dredge McFARLAND Asbestos/Lead Abatement MDC 2603 – Philadelphia District (Continuing). Abate asbestos and red lead paint to achieve current occupational safety standards in active crew spaces: forward and aft crew quarters (pilothouse, galley, etc.); aft engine and machinery rooms; and the forward dredge pump rooms. The dredge McFarland was built in 1967 when both asbestos and red lead paint were in wide use. Asbestos is present throughout the McFarland in the fireproof crew space joinery (sheathing, ceiling, and paneling); pipe insulation; and structural fireproof insulation on steel bulkheads. Red lead paint was used throughout the ship as the corrosion resistant base primer coat on all interior hull and steel. The aged vessel has asbestos fragments lodged in inaccessible areas behind the joinery panels. The vessel and its crew of 60 have two missions: (1) emergency and national defense dredging worldwide and (2) planned dredging in commercial waterways, mainly Federal navigation projects along the Atlantic and Gulf Coasts. Total estimated cost: $6,000,000. Prior Years: $5,774,300. FY 2013: $10,000. Contingency Reserve: $215,700.

(5) Dredge POTTER Texas Deck Rehab MDC 2738 – St. Louis District (Continuing). This project entails the refurbishment of the forward quarters and pilot house for the Dredge POTTER. The dredge is a 2,400 horsepower dustpan dredge which maintains 300 miles of the Mississippi River. The project will provide for more usable and habitable crew space and remove all lead based paint and asbestos. The pilot house has become crowded with all of the new electrical and electronic equipment, controls, and navigation aids that are required for modern day dredging and navigation. The present pilot house is a 1932 vintage design and is very narrow. The captain and crew must go outside during operations in all kinds of weather in order to avoid hitting obstructions. The Texas Deck also was designed in 1932 and it is where the offices are located on the dredge. The Second Deck is where the messing area and bunkrooms are located. The contaminants need to be removed from this area for the health and safety of the crew. Total estimated cost: $8,468,000. Prior Years: $8,449,184. Contingency Reserve: $18,816.

(6) Dredge WHEELER Repowering and Integrated Control and Monitoring System, MDC 2620 – New Orleans District (Continuing). Repowering by installing four replacement diesel engines is considered an addition and betterment to the WHEELER, due to the anticipated increase in fuel efficiency and the lowering of exhaust emissions for the vessel. A horsepower increase for propulsion is feasible. The engines currently in service are aged and recurring component wear and failure problems with these engines, combined with the manufacturer inability to provide replacement spare parts in a timely manner have warranted their replacement. If the WHEELER is not repowered, the engines currently in service are likely to suffer catastrophic damages as they have in the past. The high maintenance and high fuel consumption for the engines will continue. If one of the engines should become unserviceable, the vessel would likely be out of service for a period of three years in order to affect such major repairs. The vessel is primarily to support the navigation mission by dredging on the Mississippi River, Southwest Pass, and other Federal waterways. The ICMS is to be added in FY2009. The current system is obsolete and many of the electronic components are unsupportable with regard to repair or direct replacement. The benefits of repowering the WHEELER would be significantly reduced if the current ICMS is not replaced due to the decreased reliability of the vessel. Total estimated cost: $54,200,000. Prior Years: $34,573,661. FY 2013: $1,804,000. FY 2014: $500,000 Future Years: $17,322,339.

(7) Dredge FRY Shallow Draft Dredge Replacement (MDC 2609 (Murden)) - Wilmington District (Continuing). Purchase a new shallow-draft hopper dredge in order to maintain shallow coastal inlets along the Atlantic coast while adhering to environmental restrictions on side cast dredges. The dredge FRY was built in 1944 as a U.S. Navy seaplane wrecking derrick and converted to a side-casting dredge in 1972 when acquired by the Corps. Theoretically, the FRY has a remaining useful life of 9 years but in reality, it is virtually worn out and does not meet current environmental standards. Regulatory agencies have restricted its use due to the disturbance created by the discharge of dredged materials. In 2002, the dredge crane failed resulting in emergency maintenance and more downtime. Alternatively, a crane replacement and a propulsion system upgrade would require lengthy shipyard work. It has been determined by the Marine Design Center that it would be more economical to replace the vessel FRY with a new shallow draft hopper dredge than to continue repairs/upgrades. In addition, a new dredge would be compliant with new environmental restrictions on side cast dredging. Total estimated cost: $20,750,000. Prior Years: $19,847,100. FY 2013: $800,000. Contingency Reserve: $102,900.

(8) Dredge Ladder Extension for the HURLEY, MDC 2450 - Memphis District (Continuing). Make modifications to increase the dredging depth of the HURLEY from 40' to 75'. This involves lengthening the existing dredge ladder, extending the hull to accommodate the longer ladder, and modifying the ladder hoisting mechanism. As presently equipped, the HURLEY can effectively be utilized only to dredge the shallow draft channel of the Mississippi River. The ladder extension will allow the HURLEY to be used to maintain the deep draft channel from Baton Rouge to New Orleans, extending its useful dredging season to about 250 days per year. Additional ladder hoisting and forward hull propulsion and maneuverability requirements associated with the longer hull form are included. Modifications will be accomplished during the lay up period, which normally runs from December to June. Total estimated cost: $17,800,000. Prior Years: $13,376,200. FY 2013: $275,000. FY 2014: $5,000. Future Years: $4,143,800.

(9) Dredge McFARLAND Ready Reserve, MDC 2802, Philadelphia District, (Continuing). The Hopper Dredge McFARLAND is one of four Corps seagoing hopper dredges, which comprise the minimum fleet, authorized by PL 95-269. Section 2047(a) of the Water Resources Development Act of 2007 (Public Law 110-114) directed the Secretary of the Army to place the McFARLAND in ready reserve status not earlier than October 1, 2009 and not later than December 31, 2009. The dredge requires a number of upgrades and renovations to its mechanical and electrical systems in order to be reliable and meet all regulatory requirements**.** Total estimated cost: $9,699,897. Prior Years: $9,618,200. FY 2013: $34,300. Contingency Reserve: $47,397.

c. Other Floating and Mobile Land Plant:

(1) Revetment Crane Barge MDC Project 2690 – Memphis District (Continuing). The existing barge is of a 1958 series and is leaking badly and beyond repair. The crane barge is a vital part of the revetment operation on the Mississippi River where articulated concrete mats are placed on the banks of the river during low water to prevent scour and erosion. This operation has been ongoing for about one hundred years. There are two cranes and one of the cranes is used for the land clearing operation prior to the placement of the mats. The other crane is used for placement of gravel. The existing 100-ton capacity crawler cranes will be placed on the transport equipment and debris to and from the work sites. Total estimated cost: $10,000,000. Prior Years: $9,431,400. FY 2013: $3,000. Contingency Reserve: $565,600.

(2) Motor Vessel STRONG Replacement, 2730. Memphis District, (Continuing). A replacement vessel is required for the Motor Vessel STRONG. The Strong has been used on many occasions to assist the Revetment Unit, Mat Sinking Unit, and Dredge Hurley in towing of plant because of emergency conditions or equipment breakdown during the Revetment Season. The exact timing for any one of these missions is virtually impossible to predict because they are dependent on river levels and/or breakdown of other government or leased vessels. In the aftermath of Hurricane Katrina, the availability of motor vessels and barges for lease has become much more difficult. The increased horsepower and height of the new vessel will allow it to more safely and effectively respond to the needs of the Memphis District. The work includes development of a suitable progression of design and construction of one 2200-2500 BHP, self-propelled towboat. Total estimated cost: $14,000,000. Prior year: $11,061,800. FY 2013: $250,000. FY 2014: $5,000. Future Years: $2,683,200.

(3) Revetment Crane Barge - Snag Barge, MDC 2800, Memphis District (Continuing). There are currently two barges but because of escalating costs only one barge will be replaced at a time. The first barge to be replaced is believed to be a 1958 series barge. The hull has deteriorated because of corrosion and harsh operating conditions. The barge has experienced leakage due to normal deterioration and extreme service. Loss of either barge could adversely impact the overall revetment mission. Total estimated cost: $12,600,000. Prior Years: $10,646,500. FY 2013: $150,000. FY 2014: $50,000. Future Years: $1,735,500.

(4) Crane Barge (Strong Vessel), MDC 2733, Memphis District (Continuing). The project involves the design and construction of one crane barge. The current barge was obtained as salvage from the Coast Guard and will not be compatible with the motor vessel Strong replacement due to be delivered in FY09. The existing barge is narrower than the Strong replacement vessel and will create problems when setting buoys. The new barge will also have enhanced firefighting capabilities. Total estimated cost: $9,000,000. Prior Years: $5,671,700. FY 2013: $165,000. FY 2014: $5,000. Future Years: $3,158,300.

(5) Motor Vessel CLINTON Replacement, MDC 2688, Rock Island District (Continuing). The project involves design and construction of a replacement towboat. The current vessel was placed in service in 1974 and the propulsion system and other major components have reached the end of their useful life. The towboat is used to push maintenance barges for strike removal, rock placement, and repairs to structures. The vessel is required to operate at times in perilous

conditions near dams and other control structures where reliability and performance is essential in order to minimize risk to crews and other floating plant. Total estimated cost: $5,547,000. Prior Years: $4,987,353. FY 2013: $12,000. Contingency Reserve: $547,647.

(6) Survey Vessel FLORIDA Replacement, MDC 2806, Jacksonville District (Continuing). The survey vessel FLORIDA was purchased in 1973 and has deteriorated to the point that it is not longer cost effective to maintain and repair. The condition of the vessel is no longer adequate to ensure efficient and reliable coverage of all assigned survey areas. Total estimated cost: $4,989,000. Prior Years: $4,602,900. FY 2013: $165,000. FY 2014: $15,000. Future years: $206,100.

(7) SHORTY BAIRD Replacement, MDC 2885, Little Rock District (Continuing). The Project consists of replacement of the existing towboat. The current vessel is past its useful life and does not meet current safety or environmental requirements. The new towboat will support the operation and maintenance mission on the McClellan-Kerr Arkansas River Navigation System for the Little Rock District. The new vessel will provide propulsion and act as a berthing platform for the Arkansas River Fleet. The towboat will also be utilized by the Omaha District, Memphis District, and other Corps Districts as needed. Total estimated cost: $15,000,000. Prior Years: $496,000. FY 2013: $9,475,000. FY 2014: $ 300,000 Future Years: $4,728,100.

(8) Motor Vessel Quad Cities REPLACEMENT, MDC 2685, Rock Island District (Continuing). The Quad Cities Heavy Lift Crane is a one of a kind Manitowoc 36ft. ringer, heavy lift crane capable of lifting 350 tones with full 360 degree rotation that currently serves the entire Mississippi River from St. Paul to New Orleans as a regional asset. This unique piece of equipment is critical to our entire Structures Maintenance Unit mission and is central to our ongoing work process for lock miter gate and lift gate repair. It is regularly used with the Rock Island District to remove aging and damaged miter gates and install temporary spare gates so that navigation can continue uninterrupted. There is no other heavy lift barge mounted crane capable of performing these required emergency heavy lifts on the Upper Mississippi River. This 22 year old derrick barge has been exposed to repeated structural fatigue, deterioration of the base metal, and degradation of structural welds. The potential for catastrophic breakdown of the barge's main structural members during heavy lifts significantly increases with each added year of service; inevitably, this will cause extended lock closures and result in mission work stoppage. Total estimated cost: $44,840,000. Prior Years: $253,000. FY 2013: $9,050,000. FY 2014: $26,250,000. Future Years: $9,287,000.

d. Fixed Land Plant and Automated Systems:

(1) Real Estate Management Information System (REMIS) – Corpswide (Continuing). The Army Corps of Engineers is the responsible agent for the acquisition and disposition of real estate for the Army Civil Works and Military projects and for the Air Force. REMIS is the tool that the Corps uses to administer and manage property that is out-granted at civil projects, Army bases and Air Force installations. REMIS is the official, auditable database of record for the Corps Civil Works Real Property Inventory (RPI) of public lands, buildings and structures. REMIS supports e-Gov as the official database of record for the real property inventory of Army and Air Force land holdings. Base Realignment and Closure (BRAC) actions are administered by the Corps and recorded in REMIS. REMIS serves as a Chief Financial Officer compliant subsidiary ledger to CEFMS (Corps of Engineers Financial Management System), and provides annual accountability reports to the GSA (General Services Administration). The original version of REMIS had performance gaps relating to: full compliance with the DoD Real Property Inventory Requirements (RPIR), DoDI 4165.14 Instructions, DoD Real Property Unique Identification Registry (RPUIR), and Geographic Information System (GIS) capability, Graphical User Interface, Data Sharing, Document Administration and Disposal. Closure of these performance gaps will enable REMIS to become a more competent tool for life-cycle accountable asset management. Total cost has increased from $10,400,000 to $19,500,000 due to new requirements. The FY12 new requirements include the following. 1.) Office of the Secretary of Defense (OSD) mandates that REMIS interface with OACSIM's HQIIS using an automated bi-directional web exchange for near real-time interaction, rather than the original annual static submission. 2.) New enterprise level requirements mandates by the Corps Corporate Information Directorate force all system changes to go through a formal Test & Evaluation prior to release to production. 3.) Conversion of remaining data within REMIS, including Civil Works Real Property Assets, to conform to DoD Real Property Inventory Requirements (RPIR). 4.) Costs associated with postponement of the Training module development from FY11 to FY12 due to HQIIS requirement (item 1 above). 5.) The USACE Corporate Enterprise Architecture (CeA) mandates that the new graphical user interface be developed using a configurable, manageable programming protocol leading to the selection of the .NET family of programming languages. These development tasks and procedures to meet these requirements have already been, or are currently in the process of being, implemented, delaying some original tasks, including: 1) GIS capability, 2) Document Administration, 3) Timber Harvesting Module, and 4) Asset

Disposal. The modernization process had revealed two (2) additional requirements to complete the current modernization project: 1) Digitalization of hard-copy data for the GIS feature, and 2) Contingencies for annual unplanned requirements. The requested additional funding is required to complete these tasks and to continue developing under the current OSD, OACSIM, and USACE mandates. The Real Estate Programs Office is preparing a proposal for requirements that were not addressed during the current modernization cycle, projected to begin in late FY 2013 or FY 2014. Additional funding is to cover shortfalls for the initial requirements that have or will be awarded for the completion of the modernization effort. Since the beginning of the modernization effort many of the original assumptions have changed due to the continued changes in both software and hardware requirements, as well as organizational and enterprise level changes, which have lead to the incorporation of more complex and secure requirements to meet the modernization goal. Total estimated cost for the current modernization project: $23,231,000. Prior Years: $8,306,000. FY 2013: $5,900,000. FY 2014: $5,000,000. Future Years: $4,025,000. Any future funding requests will be part of a new modernization five-year plan and project.

(2) P2: Corps of Engineers Programs and Project Management System – Corpswide (Continuing). This project represents scope and cost changes to the Corps of Engineers automated information management system, P2. The P2 project was initially completed and deployed in 2004 and significantly upgraded in 2011. P2 is designed to support the business processes of Programs and Project Management for all districts, divisions, and Corps headquarters. P2 currently uses two primary commercial off the shelf applications, which include Oracle Projects and Primavera software. Additional software applications are required to provide an interface for reporting as well to import and export data fluidly between P2 and other USACE systems. One of those applications is Oracle Financial Analyzer (OFA). It allows reporting across all program areas and has specific modules for various USACE programs / accounts-- Civil Works, General, Environmental and CEMRS (USACE Manpower application). Oracle has discontinued future development and support of the OFA software, therefore a new application has to be selected to meet the USACE mission reporting needs that OFA served. The functional requirements for the replacement are currently being determined. After they have been documented procurement will be sought for OFA replacement. Additional functionality that enhances the efficiency of USACE project management may be included with the replacement application. As a result of the need to replace OFA, Project cost is increasing from $37,324,000 to $39,524,000. Cost increase is primarily due to P2 enhancing data analysis capabilities and developing a consolidated enterprise solution for greater efficiency in planning, scheduling, and tracking small and specialized projects across all mission areas. Total estimated cost: $39,524,000. Prior Years: $34,045,000. FY 2013: 3,054,000. FY 2014: $2,200,000. Future Years: $225,000.

(3) Electronic Document Management System (EDMS) - Corpswide (Continuing). Project involves purchasing and installing software for the Corps to implement a document management system and comply with Federal regulations**.** This document and records management initiative will establish policies, standards, and procedures to identify, classify, archive, preserve, and destroy documents. Total estimated cost: $8,856,000. Prior Years: $7,354,696. Project to be completed in
FY 2013.

(4) Army Corps of Engineers Information Technology (ACE-IT) Server Refresh (Hardware) - Corpswide (Continuing). Project includes purchasing hardware for the Corps enterprise information technology requirements over the next 5 years (technology refresh). The servers that are currently running the existing enterprise programs such as Program and Project Management System (P2), Corps of Engineers Financial Management System (CEFMS), and Operations and Management Business Information Link (OMBIL) are becoming obsolete and need to be replaced. In addition, servers will be purchased for emerging requirements such as the Enterprise Data Warehouse and, the Facilities and Equipment Management System (FEMS). Total estimated cost: $20,000,000. Prior Years: $5,800,000. FY 2013: $4,000,000. FY 2014: $4,000,000. Future Years: $6,200,000.

(5) Army Corps of Engineers Information Technology (ACE-IT) Server Refresh (Software) – Corpswide (Continuing). Project includes purchasing software for the servers being purchased for the refresh of the Corps enterprise information technology requirements over the next 5 years (technology refresh). The servers that are currently running the existing enterprise programs such as Program and Project Management System (P2), Corps of Engineers Financial Management System (CEFMS), and Operations and Management Business Information Link (OMBIL) are becoming obsolete and need to be replaced. In addition,

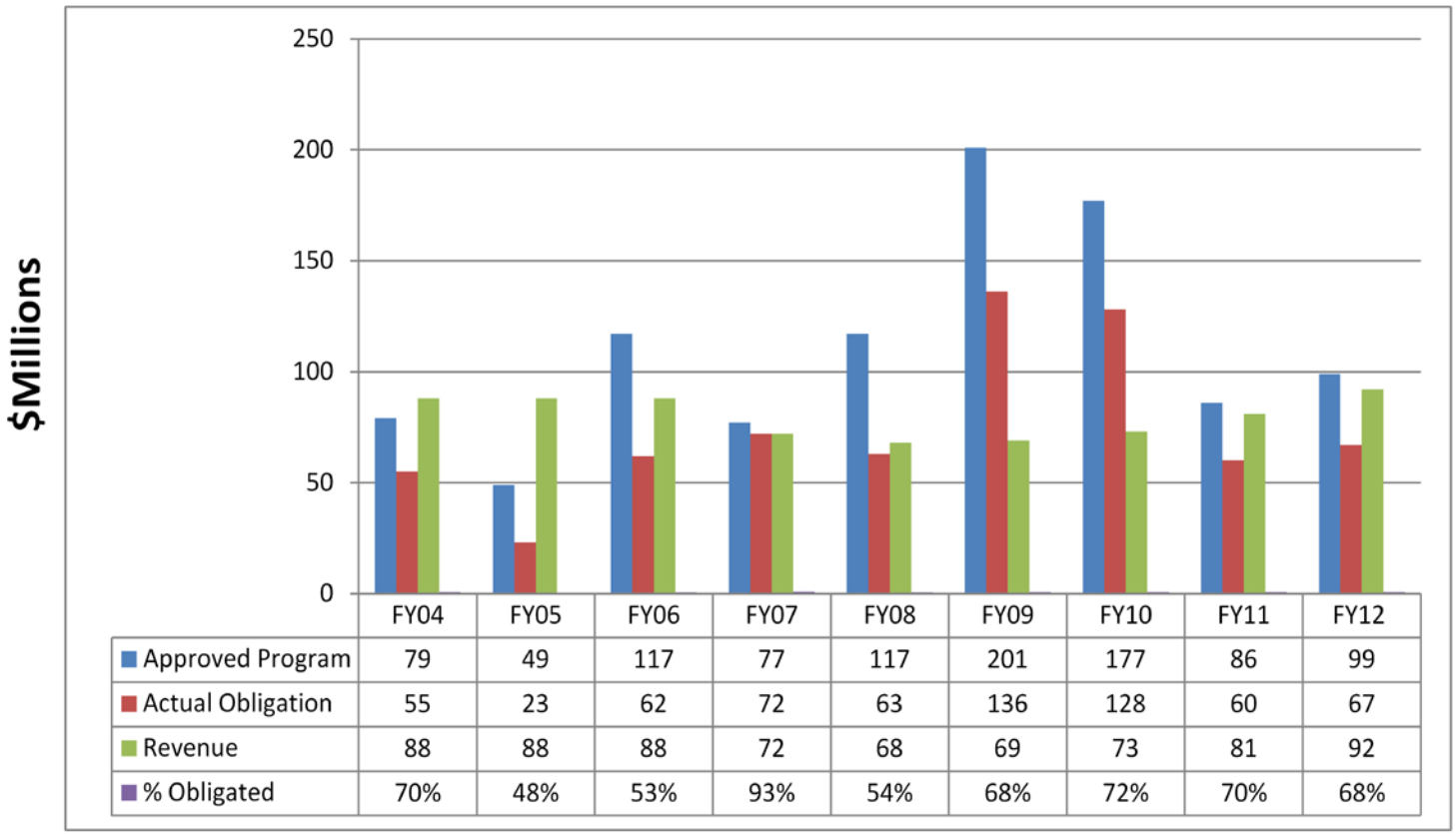
servers will be purchased for emerging requirements such as the Enterprise Data Warehouse and, the Facilities and Equipment Management System (FEMS). Total estimated cost: $5,000,000. Prior Years: $2,000,000. FY 2013: $1,000.000. FY 2014: $1,000,000. Future Years: $1,000,000.

(6) USACE Enterprise Data Warehouse (EDW) – Corpswide (Continuing). The project involves development and implementation of the Enterprise Data Warehouse (EDW). The EDW provides a means for storing data from the various Corps systems in a standard format and a central location. The EDW supplements and will ultimately replace multiple legacy automated information system databases that provide only summary roll up reporting. These local systems provide analytical reporting solutions outside of the approved systems. The EDW will provide USACE leadership with an improved reporting capability, producing more comprehensive standardized analysis allowing for more informed decision-making. The EDW has attained a three-year authority to operate through the Army accreditation process. Since the inception of the EDW initiative the project has successfully completed a prototype, pilot, and limited production phase. Successful implementation of the EDW requires accurate analysis and re-design of USACE data structures. This enables the implementation of effective data sharing and data integration across USACE systems as well as with outside agencies. The EDW improves the Corps ability to monitor and report on the planning, budgeting and execution of projects across the organization, offering the USACE community increased functionality at a lower cost through the adoption of Enterprise information technology solutions. Total estimated cost: $14,750,000. Prior Years: $7,658,427. FY 2013: $3,000,000 to complete.

DIVISION/ DISTRICT	PRIP PROJECTS, CONTINUING AND NEW TO BE FUNDED ([PROJECTS LESS THAN $5M)	CAT	TOTAL ESTIMATED COST	PRIOR FY ($000)	FY 13 ($000)	FY 14 ($000)	Future Years ($000)	Remarks
ERDC	COGNITIVE ECOLOGY FACILITY (CEF), ENGINEER RESEARCH AND DEVELOPMENT CENTER (ERDC), VICKSBURG MS	05	1,433	1,433				CONTINUING. TO BE COMPLETED
LRD/LRH	LRH REPAIR STATION	05	700	0	700			CONTINUING
LRD/LRN	CRANE-Mobile Land 35 Ton, Rough Terrain	05	500			500		NEW
MVD/MVR	ADDITION AND BETTERMENT CLOCK TOWER & ANNEX WINDOW REPLACEMENT,ROCK ISLAND ARSENAL	05	1,614	732	882			CONTINUING
MVD/MVR	IWW Material Handler	05	1,500			1,500		NEW
SAD/SAJ	Replace Building at Dredge Depot in Jacksonville, FL	05	2,800		200	2,550	50	NEW
SWD/SWG	DEMOLISH AND REPLACEMENT-BUILDING 23	05	1,187	980	207			CONTINUING
SWD/SWG	DEMOLISH AND REPLACEMENT - PORT ARTHUR OFFICE BLDG	05	1,173	655	518			CONTINUING
MVD/MVR	CLOCK TOWER ANNEX BUILDING, CENTRAL HEATING SYSTEM REPLACEMENT	10	1,277	0	150	1,092	35	CONTINUING
NWD/NWS	PERIMETER FENCE (SEATTLE DISTRICT)	10	561	561				CONTINUING
MDC-NWP	2726 YAQUINA SHIP SERVICE GENERATORS	30	3,031	2,431	400	200		CONTINUING
NWD/NWP	ESSAYONS STEERING GEAR SYSTEM	30	929	0	929			CONTINUING
LRD/LRH	DECK CARGO BARGES (Design Funds)District needs to provide total project cost and when expect to start as new major item.	40	75	0	75			CONTINUING
LRD/LRH	WORKBOAT #70 REPLACEMENT (Design Funds)District needs to provide total project cost and when expect to start as new major item	40	75	0	75			CONTINUING
LRD/LRN	EMERGENCY NAVIGATION LOCK CLOSURE CAISSON, NASHVILLE DISTRICT	40	3,300	3,300				CONTINUING
MDC/LRN	2960 LRN Deck Barges (2)	40	1,675			20	1,655	NEW
MDC/MVN	2887 MVN Deck Barges (3)	40	2,741		15	50	2,676	NEW
MDC/LRP	2900 DESIGN EFFORT-SPUD BARGE	40	1,675	7	100	1,330	238	CONTINUING
MDC-LRP	2882 DECK CARGO BARGE	40	1,885	6	100	1,540	239	CONTINUING
MDC-MVN	2623 SURVEYBOAT BRETON REPLACEMENT	40	1,887	17	1,655	150	65	CONTINUING
MDC-MVS	2783 BUOY BARGE #3 REPLACEMENT	40	700	662	10		28	CONTINUING
MDC/NAB	2794 NAB Survey Vessel Replacement	40	3,300	2	5	2,507	786	NEW
MDC/NAO	2895 NAO Drift Collector & Survey Vessel	40	3,500	4	10	2,607	879	NEW
MDC-SAM	2892 STOP LOG BARGES	40	3,600	0	3,390	180	30	CONTINUING
MDC/SAM	2893 Heavy Deck Maintenance Barge	40	3,660			3,385	275	NEW
MDC-SWL	2889 BIG ISLAND CRANE PROCUREMENT	40	3,400	15	85	3,200	100	CONTINUING

DIVISION/ DISTRICT	PRIP PROJECTS, CONTINUING AND NEW TO BE FUNDED ([PROJECTS LESS THAN $5M)	CAT	TOTAL ESTIMATED COST	PRIOR FY ($000)	FY 13 ($000)	FY 14 ($000)	Future Years ($000)	Remarks
MVD/MVN	Replacement of Survey Boat M/V Burwood	40	1,900	50		1,655	195	NEW
MVD/MVR	Replacement Crane for Manitowoc 3900	40	2,500			2,500		NEW
NWD/NWS	DEBRIS STORAGE BARGE NWS 1-12-3 REPLACEMENT	40	1,100	0	1,025		75	CONTINUING
SAD/SAJ	SAJ Replacement Barge (CN-2 with SPUD Barge	40	2,000			100	1,900	NEW
MVD/MVP	Bulldozer #1-250 HP (D7) range	50	500			500		NEW
MVD/MVP	Bulldozer #2-250 HP range	50	500			500		NEW
MVDMVP	Excavator-track mounted 2.5 cubic yard, 250 HP	50	400			400		NEW
LRD/LRC	CHICAGO DISTRICT OFFICE FURNITURE	70	1,405	0	1,405			CONTINUING
LRD/LRH	50 TON TRUCK CRANE	5X	650	0	650			CONTINUING
LRD/LRN	CRANE-MOBILE LAND 50 TON, CRAWLER, RUBBER TRACK	5X	690	0	690			NEW
LRD/LRP	CRANE-MOBILE-100 TON (REPLACE#96801) NEVILLE ISLAND, PA 15335	5X	970	10	10		950	CONTINUING
MVD/MVR	IWW MOBILE TRUCK CRANE LINKBELT REPLACEMENT	5X	675	0	675			CONTINUING
NAD/NAP	Caterpillar Articulating Dump Truck	5X	600			600		NEW
NAD/NAP	Caterpillar Wide Track Bulldozer	5X	450			450		NEW
NAD/NAP	Caterpillar 330C Excavator	5X	500			500		NEW
NWD/NWO	REPLACEMENT MOBIL DRILL RIG	5X	600			600		NEW
SAD/SAJ	40-TON TRUCK CRANE TO REPLACE 25 yr old, 25-TON TRUCK CRANE for SOUTH FLORIDA OPS OFFICE	5X	695	0	695			CONTINUING
SAD/SAM	BW&T/ALABAMA RIVERS	5X	325	0	325			CONTINUING
SAD/SAS	SONIC DRILL RIG	5X	850	0	850			CONTINUING
SWD/SWT	75 TON HYDRAULIC CRANE REPLACEMENT	5X	698		698			NEW
SWD/SWF	MOBILE DRILL RIG REPLACEMENT	5X	600			600		NEW
SPD/SPN	ACOUSTIC SINGLE AND MULTI-BEAM SONAR SYSTEMS AND RTK GPS EQUIPMENT-SIDE MOUNT TO OUTFIT S/V TIBURON	9A	515	0	515			CONTINUING
SPD/SPN	ACOUSTIC SINGLE AND MULTI-BEAM SONAR SYSTEMS AND RTK GPS EQUIPMENT-SIDE MOUNT TO OUTFIT S/V TIBURON SAFEBOAT	9A	515	0	515			CONTINUING
NWD/NWP	REGULATORY/CONSTRUCTION/WILLAMETTE VALLEY RELOCATION	LH	950	400	550			CONTINUING
	TOTAL:		**68,766**	**11,265**	**18,109**	**29,216**	**10,176**	

PRIP Trend



	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12
Approved Program	79	49	117	77	117	201	177	86	99
Actual Obligation	55	23	62	72	63	136	128	60	67
Revenue	88	88	88	72	68	69	73	81	92
% Obligated	70%	48%	53%	93%	54%	68%	72%	70%	68%

The trend in the PRIP account from FY 2008 through FY 2010 (as can be seen in the trend chart) shows Program requirements increasing but revenue declining resulting in a rapid decline in the fund balance. During FY 2010 our Finance and Accounting (F&A) office reviewed procedures for collecting income to determine why it was declining. The analysis resulted in the F&A office implementing policy changes that provide a more timely repayment of PRIP financing and a more equitable assessment of plant increment charges. Implementation of these changes occurred during FY 2011 and contributed to the increase in revenue for the year. In addition, careful planning and prioritization of new projects, close tracking of project execution and regular reviews of the collection process for increment and depreciation with adjustments being made as needed, have produced the desired effect of stabilizing the decline of funds in the account.

PRIP FUND STATUS
as of 30 September 2012

PRIP FY 2012	ACTUAL ($000)
Balance as of 1 Oct 11:	$170,153
Income:	
Recovery of PY	663
Depreciation	49,861
Plant Increment	42,463
Total Income:	92,987
Expenses:	
Less Obligations	66,730
Total Expenses:	66,730
End of Year Balance	196,411
Less Insurance Reserve	38,000
Available to Allocate in FY13	**$158,411**

PRIP PROJECTED	FY 2013 ($000)	FY 2014 ($000)
Beginning Fund Balance:	$196,411	$208,283
Less Insurance Reserve	38,000	38,000
Less Obligation Plan for Projects	80,452	74,416
Plus Projected Income	92,324	92,324
Available to Allocate FY XX:	170,273	188,191
Plus Insurance Reserve	38,000	38,000
Ending Balance:	$208,283	$226,191

National Programs

O&M JUSTIFICATION SHEET

PROJECT NAME: Inspection of Completed Works

AUTHORIZATION: Section 221 of the Flood Control Act of 1970, as amended (84 Stat. 1831, 42 U.S.C. l962d-5b), requires that a written agreement be executed between the Secretary of the Army and the non-Federal sponsor to identify the "items of local cooperation" for Corps projects, including operation and maintenance requirements. It also authorizes the Corps to "undertake performance of those items of cooperation necessary to the functioning of the project for its purposes, if the Corps has first notified the non-Federal interest of its failure to perform the terms of its agreement and has given such interest a reasonable time after such notification to so perform." To determine whether the non-Federal sponsor is performing as it has agreed, the Corps undertakes inspections of completed projects. Engineer Regulation 500-1-1, Emergency Employment of Army and Other Resources, Civil Emergency Management Program, Chapter 5, Rehabilitation and Inspection Program in conjunction with related policy guidance memoranda for the Corps Levee Safety Program establishes the policy for the inspection of Federal flood risk management projects which have non-Federal sponsors responsible for operation, maintenance, repair, replacement, and rehabilitation as specified in formal agreements based on Section 221 of the Flood Control Act of 1970 or other legislation.

LOCATION AND DESCRIPTION: The Corps civil works program includes approximately 11,750 miles of levees and floodwall systems, 383 reservoirs, and more than 90 storm damage reduction projects along 240 miles of the nation's 2,700 miles of shoreline. These account for a major portion of the projects protecting communities across the nation. Upon completion, and with the exception of reservoirs, most of the infrastructure built under this program is transferred to the sponsoring cities, towns, and special use districts to own and operate the projects. Many of these structures are adjacent to highly urbanized areas, and all of them require continued maintenance (either by the Federal government or Non-federal interests) after construction in order to ensure the project will function as intended to prevent loss of life and catastrophic damages; as well as preserve the value of the Federal investment; and to encourage non-Federal sponsors to bear responsibility for their own protection.

CONFERENCE AMOUNT FOR FY 2013: $30,603,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $718,000 O: $29,713,000 T: $30,431,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $0

FRM: $30,431,000- See attached table for breakdown by state.

The Inspection of Completed Works activities encompass all federally constructed and primarily locally maintained flood risk reduction projects that meet the Corps condition requirements. In 2006, the U.S. Army Corps of Engineers created its Levee Safety Program with the mission to assess the integrity and viability of levees and recommend courses of action to make sure that levee systems do not present unacceptable risks to the public, property and environment. The Inspection of Completed Works Program is now guided by the Levee Safety Program. One of the main activities includes inspections of federally authorized projects operated and maintained by a non-Federal sponsor. These inspections determine if the project will perform as expected; identify deficiencies or areas which need monitoring or immediate repair; to identify any changes over time; and collect information in order to be able to make informed decisions about future actions. Other activities will include updating information in the National Levee

Database; screening levees to rank them in order of risk; conducting pre-storm inspections of Federally authorized hurricane shore protection systems; conducting pre-inspection preparation and post inspection reporting and notification requirements; coordinating Levee Safety Program efforts with public sponsors or stakeholders; reviewing sponsor proposed alterations, improvements, excavations or construction which are in accordance with Corps policy and guidance for such proposals i.e. Section 208/408 proposals; and updating project operation and maintenance manuals.

RC: $0 .

H: $0

EN: $0 -

WS: $0 - N/A

OTHER INFORMATION: Coordination between the Corps and other Federal, state, and local agencies is essential for proper accomplishment of this program. In addition to satisfying Corps' requirements, the improved inspection results will be made available on the National Levee Database for use by local, State, and other Federal agencies responsible for state and local Levee Safety Programs

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is $0. This amount will be used to perform work on the project as follows: N/A

2/ There was no Conference Amount available at the time this J-sheet was prepared. The amount shown is the President's budget amount for FY 2013.

TABLE BREAKDOWN BY STATE

	STATE	AMOUNTS
LRD	INSPECTION OF COMPLETED WORKS, IL	570
LRD	INSPECTION OF COMPLETED WORKS, IN	1008
LRD	INSPECTION OF COMPLETED WORKS, KY	988
LRD	INSPECTION OF COMPLETED WORKS, MI	230
LRD	INSPECTION OF COMPLETED WORKS, NY	612
LRD	INSPECTION OF COMPLETED WORKS, OH	694
LRD	INSPECTION OF COMPLETED WORKS, PA	818
LRD	INSPECTION OF COMPLETED WORKS, VA	42
LRD	INSPECTION OF COMPLETED WORKS, WV	346
MVD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, IL	50
MVD	INSPECTION OF COMPLETED WORKS, AR	236
MVD	INSPECTION OF COMPLETED WORKS, IA	338
MVD	INSPECTION OF COMPLETED WORKS, IL	1986
MVD	INSPECTION OF COMPLETED WORKS, KY	45
MVD	INSPECTION OF COMPLETED WORKS, LA	708
MVD	INSPECTION OF COMPLETED WORKS, LA	466
MVD	INSPECTION OF COMPLETED WORKS, MN	484
MVD	INSPECTION OF COMPLETED WORKS, MO	882
MVD	INSPECTION OF COMPLETED WORKS, MS	85
MVD	INSPECTION OF COMPLETED WORKS, ND	271
MVD	INSPECTION OF COMPLETED WORKS, TN	96
MVD	INSPECTION OF COMPLETED WORKS, WI	61
NAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, CT	15

NAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, MA	15
NAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, ME	15
NAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, RI	15
NAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, VA	15
NAD	INSPECTION OF COMPLETED WORKS, CT	268
NAD	INSPECTION OF COMPLETED WORKS, DC	115
NAD	INSPECTION OF COMPLETED WORKS, DE	40
NAD	INSPECTION OF COMPLETED WORKS, MA	306
NAD	INSPECTION OF COMPLETED WORKS, MD	135
NAD	INSPECTION OF COMPLETED WORKS, ME	95
NAD	INSPECTION OF COMPLETED WORKS, NH	61
NAD	INSPECTION OF COMPLETED WORKS, NJ	466
NAD	INSPECTION OF COMPLETED WORKS, NY	914
NAD	INSPECTION OF COMPLETED WORKS, PA	400
NAD	INSPECTION OF COMPLETED WORKS, RI	45
NAD	INSPECTION OF COMPLETED WORKS, VA	317
NAD	INSPECTION OF COMPLETED WORKS, VT	220
NAD	INSPECTION OF COMPLETED WORKS, WV	115
NWD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, OR	20
NWD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, WA	53
NWD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, WY	10
NWD	INSPECTION OF COMPLETED WORKS, CO	135
NWD	INSPECTION OF COMPLETED WORKS, IA	318
NWD	INSPECTION OF COMPLETED WORKS, ID	358
NWD	INSPECTION OF COMPLETED WORKS, KS	631

NWD	INSPECTION OF COMPLETED WORKS, MO	631
NWD	INSPECTION OF COMPLETED WORKS, MT	177
NWD	INSPECTION OF COMPLETED WORKS, ND	113
NWD	INSPECTION OF COMPLETED WORKS, NE	449
NWD	INSPECTION OF COMPLETED WORKS, OR	578
NWD	INSPECTION OF COMPLETED WORKS, SD	146
NWD	INSPECTION OF COMPLETED WORKS, WA	1093
NWD	INSPECTION OF COMPLETED WORKS, WY	123
POD	INSPECTION OF COMPLETED WORKS, AK	155
POD	INSPECTION OF COMPLETED WORKS, HI	885
SAD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, GA	15
SAD	INSPECTION OF COMPLETED WORKS, AL	100
SAD	INSPECTION OF COMPLETED WORKS, FL	1500
SAD	INSPECTION OF COMPLETED WORKS, GA	180
SAD	INSPECTION OF COMPLETED WORKS, MS	50
SAD	INSPECTION OF COMPLETED WORKS, NC	261
SAD	INSPECTION OF COMPLETED WORKS, SC	66
SPD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, CA	10
SPD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, CO	10
SPD	INSPECTION OF COMPLETED ENVIRONMENTAL PROJECTS, NM	30
SPD	INSPECTION OF COMPLETED WORKS, AZ	101
SPD	INSPECTION OF COMPLETED WORKS, CA	3987
SPD	INSPECTION OF COMPLETED WORKS, CO	187
SPD	INSPECTION OF COMPLETED WORKS, NM	676
SPD	INSPECTION OF COMPLETED WORKS, NV	73

SPD	INSPECTION OF COMPLETED WORKS, TX	543
SPD	INSPECTION OF COMPLETED WORKS, UT	52
SWD	INSPECTION OF COMPLETED WORKS, AR	281
SWD	INSPECTION OF COMPLETED WORKS, KS	352
SWD	INSPECTION OF COMPLETED WORKS, MO	44
SWD	INSPECTION OF COMPLETED WORKS, OK	180
SWD	INSPECTION OF COMPLETED WORKS, TX	1270
	TOTAL	**30,431,000**

O&M JUSTIFICATION SHEET

PROJECT NAME: Water/Environmental Certification

AUTHORIZATION: Authorities inherent in project-specific authorizations for operation and maintenance for navigation purposes.

LOCATION AND DESCRIPTION: The water quality certification is for deep draft and shallow draft navigation projects. No dredging activities can be performed without necessary environmental and water certifications. This national program is to perform critical, routine activities needed to acquire or renew water and environmental certifications for projects that are not funded separately. Funding is for critical activities to acquire water quality, environmental certification, and coordination with other Federal, State and local agencies for cyclical dredging at projects that do not receive annual funding to ensure required environmental documentation. Projects are required to comply with local, state, and federal environmental laws and regulations. These activities provide the necessary effort to ensure compliance, including endangered species compliance.

CONFERENCE AMT. FOR FY 2013: $315,000 2/
BUDGETED AMOUNT FOR FY 2014: **M**: 0 **O**: $130,000 **T**: $130,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $130,000 - The Water/Environmental Certification activities encompass coordination with Federal and State natural resources agencies to meet environmental requirements associated with dredging for deep and shallow draft navigation projects. The primary purpose of these activities is coordination between the Corps and other Federal, local, and state agencies to meet environmental requirements associated with dredging. These projects are typically not regularly funded. Without Water Quality Certification renewal, extensive delays in dredging will result when funding is received for necessary dredging. See table in Other Information below for breakdown by state.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION:

FY 2013 WATER/ENVIRONMENTAL CERTIFICATION PROGRAM

WATER/ENVIRONMENTAL CERTIFICATION, FL	$ 0
WATER/ENVIRONMENTAL CERTIFICATION, MS	$ 0
WATER/ENVIRONMENTAL CERTIFICATION, VA	$ 130,000
TOTAL	$ 130,000

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Project Condition Surveys

AUTHORIZATION: Public Law 85-480, approved July 2, 1958 authorizes the Chief of Engineers to publish information, including condition surveys, that may be of value to the general public.

LOCATION AND DESCRIPTION: This national program consists of performing hydrographic surveys for Federally maintained navigation projects on a state-by-state basis. Hydrographic surveys are conducted for navigation channels, inlets and anchorages within, approaching and surrounding states.

CONFERENCE AMT. FOR FY 2013: $17,884,000 2/
BUDGETED AMOUNT FOR FY 2014: **M**: 0 **O**: $19,302,000 **T**: $19,302,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $19,302,000- Hydrographic surveys of Federal navigation channels are planned for Fiscal Year 2014 in order to disseminate the navigation channel condition for users of the waterways. This information is also used in the decision making process for channel maintenance operations. The selection of which projects to survey and scheduling of surveys is based upon channel usage, shoaling rates and maintenance dredging schedules. The need for Project Condition Surveys (PCS) is based primarily upon when that project was last surveyed. The surveys are generally conducted on a rotational basis, taking into account the expected sedimentation rates and historic maintenance. This generally includes projects that do not routinely receive O&M appropriations and that are not regularly maintained. For those projects scheduled to be dredged in the budget year, PCS for that segment of the project is not requested since that project will include pre- and post-dredging surveys. Another consideration in the use of funding for PCS is the ability to respond to unanticipated needs, including concerns raised by the U.S. Coast Guard, local harbor masters, or other agencies regarding projects that have become shoaled as a result of severe storms and/or abnormal deposition rates that may have compromised safe navigation. See table below in Other Information for breakdown by state.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION:

FY14 PROJECT CONDITION SURVEYS

PROJECT CONDITION SURVEYS, AL	$	148,000
PROJECT CONDITION SURVEYS, AR	$	2,000
PROJECT CONDITION SURVEYS, CA	$	1,663,000
PROJECT CONDITION SURVEYS, CT	$	850,000
PROJECT CONDITION SURVEYS, DC	$	25,000
PROJECT CONDITION SURVEYS, DE	$	200,000
PROJECT CONDITION SURVEYS, FL	$	1,465,000
PROJECT CONDITION SURVEYS, GA	$	161,000
PROJECT CONDITION SURVEYS, HI	$	683,000
PROJECT CONDITION SURVEYS, IL	$	106,000
PROJECT CONDITION SURVEYS, IN	$	185,000
PROJECT CONDITION SURVEYS, KY	$	2,000

PROJECT CONDITION SURVEYS, LA	$	59,000
PROJECT CONDITION SURVEYS, MA	$	900,000
PROJECT CONDITION SURVEYS, MD	$	450,000
PROJECT CONDITION SURVEYS, ME	$	1,100,000
PROJECT CONDITION SURVEYS, MI	$	670,000
PROJECT CONDITION SURVEYS, MN	$	87,000
PROJECT CONDITION SURVEYS, MO	$	14,000
PROJECT CONDITION SURVEYS, MS	$	154,000
PROJECT CONDITION SURVEYS, NC	$	700,000
PROJECT CONDITION SURVEYS, NH	$	250,000
PROJECT CONDITION SURVEYS, NJ	$	1,797,000
PROJECT CONDITION SURVEYS, NY	$	2,089,000
PROJECT CONDITION SURVEYS, OH	$	305,000
PROJECT CONDITION SURVEYS, OR	$	400,000
PROJECT CONDITION SURVEYS, PA	$	170,000
PROJECT CONDITION SURVEYS, RI	$	350,000
PROJECT CONDITION SURVEYS, SC	$	875,000
PROJECT CONDITION SURVEYS, TN	$	2,000
PROJECT CONDITION SURVEYS, TX	$	325,000
PROJECT CONDITION SURVEYS, VA	$	1,368,000
PROJECT CONDITION SURVEYS, WA	$	606,000
PROJECT CONDITION SURVEYS, WI	$	288,000
TOTAL	$	19,302,000

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M JUSTIFICATION SHEET

PROJECT NAME: Scheduling of Reservoir Operations

AUTHORIZATION: Section 7 of the Flood Control Act of 1944 (as amended).

LOCATION AND DESCRIPTION: Funding provided for Nation-wide program to facilitate and coordinate the operations of Federal and non-Federal dams for which there is a Federal interest and investment in providing dedicated flood space.

CONFERENCE AMOUNT FOR FY 2013: 7,598,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $769,000 O: $6,119,000 T: $ 6,888,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:
N: $0

FRM: $6,888,000 See attached table for breakdown by state.

NAD: Provide reservoir regulation instructions to regulate Savage River Dam, which is owned by Upper Potomac River Commission and Stevenson Dam, owned by the Commonwealth of PA.

NWD: Funds the Districts' portions of the Water Management budget necessary for management of non-Corps dams where the Corps has flood control responsibilities, including any dam built with federal dollars. Within NWD, the vast majority of these non-Corps dams are Bureau of Reclamation projects, but others including Wynoochee Dam and the congressionally authorized project at Upper Baker Dam are also managed with these funds. Funds are used for water control data collection for the portion of the total USGS Cooperative Stream gage Program which supports these non-Corps projects. Funding to the USGS Cooperative Stream gage Program maintains only those stream gages necessary for scheduling the release of flood control storage from these non-Corps projects for which the Corps has flood control responsibility.. Funds are also used for each District's daily Water Management activities in support of these projects. This includes all aspects of daily operations within Water Management including reservoir regulation and flood releases from these projects. These projects require District Water Management offices to develop and maintain water control plans; direct flood control operations; prepare monthly summary reports (R0168's); ensure daily review of stream gages; review and comment on Bureau of Reclamation annual operating plans for use of conservation storage; maintain water control manuals, as well as review, comment and process deviations and manual-change requests through Division Water Management.

SAD: The project provides required water management oversight and monitoring of water control plans located in Central & Southern Florida to achieve maximum benefits. $35,000 Funding is utilized to support labor needed to coordinate with Sponsor on water related management activities to achieve maximum benefits on monitoring of water control plans.

SWD: Funds the Districts' portions of Water Management System (Reservoir Control Center); water control data collection; portion of the total USGS Cooperative Stream gage program which supports Section 7 projects; and daily water management activities, including flood pool operations, in support of Section 7 projects. Also supports daily operations within the Districts' water management program which is to develop and maintain water control plans; direct flood control operations; ensure daily review of stream gages; forecast during flood events; review and comment on Section 7 annual operating plans for use of conservation storage; and review, comment and process deviations and manual-change requests through Division Water Management.

OTHER INFORMATION: None

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Table Breakdown by State

MSC	PROGRAM NAME	Total	M/O
NAD	SCHEDULING RESERVOIR OPERATIONS, MD	45	O
NAD	SCHEDULING RESERVOIR OPERATIONS, PA	45	O
NWD	SCHEDULING RESERVOIR OPERATIONS, ID	580	O
NWD	SCHEDULING RESERVOIR OPERATIONS, KS	205	O
NWD	SCHEDULING RESERVOIR OPERATIONS, MO	205	O
NWD	SCHEDULING RESERVOIR OPERATIONS, MT	243	O
NWD	SCHEDULING RESERVOIR OPERATIONS, ND	247	O
NWD	SCHEDULING RESERVOIR OPERATIONS, OR	104	O
NWD	SCHEDULING RESERVOIR OPERATIONS, WA	500	O
NWD	SCHEDULING RESERVOIR OPERATIONS, WY	121	O
SAD	SCHEDULING RESERVOIR OPERATIONS, FL	35	O
SPD	SCHEDULING RESERVOIR OPERATIONS, AZ	53	O
SPD	SCHEDULING RESERVOIR OPERATIONS, CA	44	M
SPD	SCHEDULING RESERVOIR OPERATIONS, CA	1391	O
SPD	SCHEDULING RESERVOIR OPERATIONS, CO	35	M
SPD	SCHEDULING RESERVOIR OPERATIONS, CO	573	O
SPD	SCHEDULING RESERVOIR OPERATIONS, NM	547	O
SPD	SCHEDULING RESERVOIR OPERATIONS, UT	40	M
SPD	SCHEDULING RESERVOIR OPERATIONS, UT	501	O
SWD	SCHEDULING RESERVOIR OPERATIONS, KS	75	M
SWD	SCHEDULING RESERVOIR OPERATIONS, KS	75	O
SWD	SCHEDULING RESERVOIR OPERATIONS, OK	500	M
SWD	SCHEDULING RESERVOIR OPERATIONS, OK	500	O
SWD	SCHEDULING RESERVOIR OPERATIONS, TX	75	M
SWD	SCHEDULING RESERVOIR OPERATIONS, TX	149	O

O&M JUSTIFICATION SHEET

PROJECT NAME: Surveillance of Northern Boundary Waters

AUTHORIZATION: Boundary Waters Treaty of 1909.

LOCATION AND DESCRIPTION: The main activities conducted under the Surveillance of Northern Boundary Waters Program is the support of the Boundary Waters Treaty of 1909 including technical and secretarial support of the International Joint Commission (IJC) and its Boards of Control, Committees, and various study boards. Activities are centered supporting the principles and mechanisms to help resolve disputes and to prevent future ones, primarily those concerning water quantity and water quality along the boundary between Canada and the United States.

CONFERENCE AMOUNT FOR FY 2013: $15,187,000 2/

BUDGETED AMOUNT FOR FY 2014: M:$ O: $11,367,000 T: $11,367,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $0

FRM: $11,367,000- See attached table for breakdown by state.

Specific LRD activities within the Great Lakes region include technical support for the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data; International Superior Board which includes the monthly regulation of Lake Superior; International St. Lawrence River Board which includes the weekly regulation of Lake Ontario and lake level forecasting on a weekly and monthly basis; International Niagara Board which includes the monitoring and oversight of the Lake Erie ice boom, Niagara Control Structure, and Niagara Falls flows; connecting channel depths forecasts bi-weekly; continuous monitoring of basin conditions; collection and dissemination of basin data; hydraulic modeling of the connecting channels and impact analyses due to dredging, construction or other projects; derivation of stage-discharge relationships for the connecting channels; computation of official outflows from the Great Lakes; computation of net basin supplies for the Great Lakes; water level gauging of the connecting channels; hydraulic discharge measurements and hydropower inspections to support treaty requirements and water use agreements; implementing adaptive management and, coastal process monitoring.

All of the above missions are ongoing areas of work. Upcoming efforts include: continued support for the International Upper Great Lakes Study which is looking at Lake Superior regulation; implementing adaptive management and supporting development of a new regulation plan for Lake Ontario; continued improvements to (and documentation of) forecasting operations, inclusion of new data sets and analyses techniques; continued improvements to hydraulic models including the addition of ice and weed retardation; and, more intensive monitoring of daily changes in basin hydro-meteorologic parameters.

MVD activities center around the 1925 Lake of the Woods Convention and Protocol, the 1938 Rainy Lake Convention, and the 1989 International Agreement for Water Supply and Flood Control between the U.S. and Canada. These activities include monitoring daily lake levels and outflows; monitoring and approving international apportionment of water; forecasting lake levels and river flows during periods of high or low water; participating in Board and public meetings; collecting, analyzing, and maintaining hydrometeorologic data, including post-flood reports; monitoring flood operations; assisting in transboundary dispute resolution; and preparing and disseminating information to the public

NWD activities include funding District work associated with IJC activities for the Kootenay Lake Board of Control and the Osoyoos Lake Board of Control. Work includes preparation of Annual Reports, monitoring Kootenay Lake and basin conditions for compliance with the 1938 IJC Order on Kootenay Lake, preparing for and attending Board and public meetings, and responding to miscellaneous issues and questions raised by the public, agencies, the Boards, and the IJC. A multi-year study is addressing technical, political, legal, environmental and societal issues, and trade-off analyses that will support a recommendation by the U.S. Entity to the State Department before 2014 as to whether the Columbia River Treaty should be continued, modified, or terminated after Sept. 2024

NAD activities include efforts in conjunction with the International St. Croix River Board of Control. In accordance with Boundary Waters Treaty of 1909 and 2000 revised directive to the International St. Croix River Board of Control from the International Joint Commission, the NAE District Engineer is U.S. Section member of the Board of Control. A member of the Planning Branch of the New England District serves as the Secretary of the U.S. Section. Periodic meetings, including public meetings, take place on both the American and Canadian sides.

OTHER INFORMATION:

Many stakeholders exist in the basin and are regularly served by these missions including: commercial navigation (i.e. Lake Carriers Association); hydropower production; recreational boating; shoreline property owners; academic and research institutions; other Federal agencies; state and local agencies; non-governmental organizations; environmental interest groups; and private citizen groups

1/ Estimated Unobligated “Carry-in” Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

TABLE BREAKDOWN BY STATE

MSC	STATE	AMOUNT
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, IL	706
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, IN	135
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, MI	2653
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, MN	351
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, NY	590
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, OH	249
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, PA	103
LRD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, WI	540
MVD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, MN	111
MVD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, ND	32
NAD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, ME	25
NWD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, OR	5794
NWD	SURVEILLANCE OF NORTHERN BOUNDARY WATERS, WA	78
	TOTAL	$11, 367,000

O&M JUSTIFICATION SHEET

PROJECT NAME: Removal of Aquatic Growth

AUTHORIZATION: River and Harbor Act of 1899, as amended.

LOCATION AND DESCRIPTION: This national program provides annual mission essential prevention, control and removal of nuisance aquatic vegetation impacting, obstructing or threatening navigation in the Federal navigation channels in the Gulf Coast. This includes several hundred miles of channel with approximately 675,000 surface acres. Operational priority is given to controlling floating nuisance vegetation in order to keep the principal navigable waterways and locks open for navigation. Additionally, this vegetation displaces native species, changing community structure and altering ecological functions potentially impacting threatened and endangered species including the Everglades Snail Kite, Okeechobee gourd and the wood stork. These invasive species also interfere with operation and maintenance of levees and canals and compromise the integrity of the navigation and flood control structures.

CONFERENCE AMT. FOR FY 2013: $3,700,000 2/
BUDGETED AMOUNT FOR FY 2014: **M**: $3,700,000 **O**: 0 **T**: $3,700,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $3,700,000- The primary purpose of these operations is to control floating nuisance vegetation in order to keep the principal navigable waterways and locks open for navigation in the listed Federal Navigation projects. The program consists of maintenance control operations to control vegetation in the Gulf Coast, including St. Johns, Kissimmee, Withlachoochee, Crystal and Ocklawaha Rivers in addition to the Okeechobee Waterway and Lake Okeechobee. Maintenance control is defined as keeping target vegetation at the lowest feasible levels to protect navigation interests. Anticipate controlling approximately 15,000 – 17,000 acres of vegetation in FY 2014. In addition the Corps will conduct educational outreach activities for our customers, conduct pre- and post-treatment surveys, ensure safety of our staff and the public and conduct an environmentally compatible program. Coordination between the Corps and other Federal, state, and local agencies is conducted on a continual basis. The Florida Wildlife and Conservation Commission is the principal state agency involved in project coordination. See table below in Other Information for breakdown by state.

FRM: N/A.

RC: N/A.

H: N/A.

EN: N/A.

WS: N/A.

OTHER INFORMATION:

FY 2014 REMOVAL OF AQUATIC GROWTH

REMOVAL OF AQUATIC GROWTH, FL	$ 3,500,000
REMOVAL OF AQUATIC GROWTH, LA	$ 200,000
TOTAL	$ 3,700,000

1/ Estimated Unobligated "Carry-in" Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Remaining Items - Investigations

	Allocation in FY 2013 2/	Budgeted Amount for FY2014 1/	Increase Over FY14 and FY13
Access to Water Resource Data	$750,000	$750,000	$0

AUTHORIZATION: Water Resources Development Act 2007; Section 2017.

The U.S. Army Corps of Engineers (USACE) Civil Works Strategic Plan presents a bold initiative for the USACE to manage our Nation's public water resources in collaboration with others through a watershed approach. The watershed approach recognizes that physical, chemical, and biological processes are intertwined and must be managed in an integrated manner. The USACE advocates a holistic view to sustainable water resources solutions in partnership with other Federal agencies, Tribes, State and local governments, and non-governmental organizations. America faces real water challenges — such as deteriorating infrastructure, increasing demands for water resources functions, competing water uses, and serious environmental challenges — in a climate of diminishing fiscal resources and fragmented responsibilities. Successful implementation of these strategic goals requires that the USACE provide access to water resources data and related water quality data to the public and all stakeholders for integrated water resources decision making.

Funds are requested to implement “Water Quality Data Management Implementation Plan” which calls for the Development of standard business processes, procedures and database models to manage water quality and quantity data generated by the full range of Corps water resources activities in conjunction with EPA, USGS and NOAA Water Control and Water Quality Programs. This may include water quality/quantity information associated with stream gages, water quality gages and other monitoring devices and water resources model and analytical tool output. These data include variables such as precipitation, water chemistry, temperature, evaporation, sedimentation, biological and habitat data, riverine discharges and stages, reservoir storage, inflows and outflow. This will include developing QA/QC processes and criteria for collected data. Water quantity and water quality data will be made available to the public through a standard web interface in a downloadable format as soon as quality assurance/quality control has been conducted by the USACE.

PROPOSED ACTIVITITIES FOR FY 2014:

- Continue to provide public access to Water Control Data and publish standard operating procedures for Districts to follow in managing their water quality data.
- Develop policy and guidance regarding public access to Corps water quality and water management data.
- Make data on the permits issued under the authority of the USACE (Clean Water Act and Rivers and Harbors Act) available to the public
- Coordinate with Other Federal Agencies and solicit feedback on management and implementation strategy.
- Develop tools and processes for making it easier to pull water control/quality data into a central database.
- Develop streaming technologies to synchronize water management data at the national level between water management national backup systems and EGIS servers.
- Develop long term strategy and funding needed to sustain public access to USACE Water Resources.

ACCOMPLISHMENTS IN PRIOR YEARS:

- Published District Water Control Data into a single database structure allowing for easy access by public
- Developed a systematic approach for visualization of realtime reservoir metadata and visualization via the Corps Water Management System and database
- Established a management system for capturing realtime reservoir data streams from individual USACE districts, enabling water managers with tools for updating and monitoring publicly available data streams.

- Executed survey of District offices to capture current Water Control/Quality Management Activities
- Finalized “Water Quality Data Management Implementation Plan”
- Published District water quality data through EPA Water Quality Exchange for non-time series water quality data and the Corps Water Management System for time-series Water Quality data.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY 2013	Budgeted Amount in FY 2014
Committee on the Marine Transportation System (CONTINUING)	$100,000 2/	$100,000 1/

AUTHORIZATION: The Committee on the Marine Transportation System was established as directed by the President in the *Ocean Action Plan – The Administration's Response to the U.S. Commission on Ocean Policy* – 17 December 2004.

JUSTIFICATION: The Committee on the Marine Transportation System (CMTS) was elevated to an interagency Cabinet-level committee by the President's Ocean Action Plan, December 2004. The CMTS held its first meeting in July 2005 and continues to meet 2-3 times per year. The Assistant Secretary of the Army (Civil Works) has been named as the Department of Defense (DOD) representative to the CMTS. The Chief of Engineers was selected to be the initial chair of the CMTS Coordinating Board, which advises and implements directives of the CMTS. An interagency Executive Secretariat supports the day-to-day activities of the CMTS on behalf of the Coordinating Board. The Corps is providing a full-time GS-15 liaison to the CMTS Executive Secretariat. This position reports to the Chief of Operations, HQUSACE, and HQ Operations has had the lead in CMTS coordination. The Corps has also been tasked by the CMTS to lead an interagency team to conduct an Assessment of the Current and Future State of the U.S. Marine Transportation System. With support from the Deputy Commanding General for Civil and Emergency Operations, this Assessment effort was redirected into a new action team to form a consolidated CMTS response to the National Ocean Policy Task Force Report and other key maritime issues requiring interagency coordination. The need to support CMTS activities will continue annually as the Corps assumes the leadership role of the Ocean Policy Response Team. Dedicated funding to support Corps participation in the CMTS is essential if the Corps and DOD are to be full participants with other Cabinet Departments and agencies in Committee activities and initiatives. Corps participation in CMTS is a priority for the ASA(CW), the Chief of Engineers and the Deputy Commanding General for Civil and Emergency Operations.

PROPOSED ACTIVITIES FOR FY 2014: The funds requested in FY 2014 will be used to continue interagency coordination and to support the DOD share of other initiatives requested by the Committee, including MTS Data and Information Portal, and MTS R&D Needs. The newly-established Infrastructure Investment Integrated Action Team will be used to advance work between DOT and Army to align transportation infrastructure investments. A recently-established e-Navigation Integrated Action Team will enact implementation plans and provide reports to describe the application of e-Navigation integration. Co-lead the Integrated Action Team for MTS R&D Needs. Coordinate with other Departments and agencies participating in CMTS and provide support for studies and initiatives requested by the Cabinet-level CMTS (National Export Initiative, etc).

ACCOMPLISHMENTS IN PRIOR YEARS: Activities in FY 2013 include the completion of the e-Navigation National Strategy, efforts of Integrated Action Team for a consolidated CMTS response to the National Ocean Policy Task Force Report. Establishment of two new IATs (Investment IAT and e-Navigation IAT), providing follow-up work associated with the 2nd biennial CMTS/TRB MTS Research & Development Conference, "Diagnosing the Marine Transportation System: Measuring Performance and Targeting Improvement". Support to senior leaders and ASA(CW) participation in CMTS cabinet-level and Coordinating Board meetings and activities. Participation in interagency working groups and reviews.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

FOA: Institute for Water Resources

Committee on the Marine Transportation System

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

1. Surveys

Coordination with Other Federal Agencies, State, and Non-Federal Interest Other Coordination Programs

The CALFED request is $100,000 1/ 2/ which is a portion of the CALFED coordination funds cited in section 103(f)(4)(A) of PL 108-361, the CALFED Act. The funds will be used to continue program support, coordination, and USACE representation efforts in the Federal and State CALFED process in Fiscal Year 2014. The CALFED Record of Decision named the Corps and State of California as implementation co-managers of the CALFED Levee System Integrity program. As stated in section 103(f)(4)(A) of PL 108-361, the CALFED Act, the Corps requests funds for program management, oversight, and coordination. Activities stated in the Act include: program support; program-wide tracking of schedules, finances, and performance; multi-agency oversight and coordination of program activities to ensure program balance and integration, development of interagency cross-cut budgets and a comprehensive finance plan to allocate costs in accordance with the Record of Decision; coordination of public outreach and involvement, including tribal, environmental justice, and public advisory activities in accordance with the Federal Advisory Committee Act; and development of annual reports.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0.
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

1. SURVEYS

e. Cooperation with Other Federal Agencies, States, and Non-Federal Interests

(5) Chesapeake Bay Program. The amount of $75,000 1/ is requested to continue, increase, and invigorate activities initiated under Special Investigations. The Chesapeake Bay Program (CBP) is an interagency program, initiated by the US Environmental Protection Agency (EPA), for the protection and restoration of the Bay's natural resources. These natural resources have tremendous environmental and economic significance to the Northeast and to the Nation. Following extensive Corps of Engineers investigations and EPA studies in the 1970's and early 1980's, it became increasingly clear that the Chesapeake Bay system was under intense pressure from development and overuse and was undergoing degradation in water quality, living resources and other ecological indicators. With the funds requested, the Baltimore District will continue participation and provide leadership involvement in the CBP Implementation Committee; the Federal Agencies Subcommittee; the Living Resources, Monitoring, Modeling and Toxics Subcommittee; and numerous workgroups addressing various subjects such as regional sediment management, wetlands, submerged aquatic vegetation, and land stewardship.

ASA (CW) was a signatory on a Special Tributary Strategy for Federal Lands in the District of Columbia agreement that commits the Corps to develop stormwater pollution prevention and nutrient management plans. The Baltimore District will play a key role on this Special Tributary Strategy as well as initiate activities to enhance stewardship of Corps -owned land within the Bay watershed. Many of these actions affect Corps authorized missions in the Chesapeake Bay.

The District participated in development of Executive Order (E.O.) 13508: Chesapeake Bay Protection and Restoration, signed by President Obama on 12 May 2009, which uses the Chesapeake Bay as a pilot for other “national treasures.” The District is also involved in the Federal Leadership Committee for the Chesapeake Bay, Agency Action reports in support of the E.O., and on Goal Implementation Teams. All of these efforts require extensive consultation and collaboration to achieve successful shared leadership, planning, accountability, and restoration of the largest estuary in the United States of America.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0.

Coordination Studies With Other Agencies

	Allocation In FY2013		Budget Amount For FY2014	
Other Coordination Programs (Continued)	$500,000	2/	$500,000	1/

(c) The Coordination with Other Water Resources Agencies budget amount is $500,000. This account provides funds to enable coordination with other Federal agencies. These include cooperation with the Department of Agriculture (USDA) under the Watershed Protection and Flood Prevention Act of 1954 (Section 5 of PL 566-83), as amended; the Flood Control Act of December 22, 1944 (Section 1 of PL 534-78), as amended; and the National Environmental Policy Act of 1969 (PL 91-190. The Corps is also required by Section 102 (2)(c) of the National Environmental Policy Act of 1969 to review the environmental impacts that would result from installation of USDA project features. Cooperation with the Bureau of Reclamation of the Department of the Interior includes preparation of estimates of flood control requirements, and benefits, and reservoir operating criteria for storage reservoirs to be constructed with Federal funds, in accordance with Sections 1 and 7 of PL 534-78 and Section 7 of PL 984-84, as amended. Studies made by the Bureau of Reclamation of the flood control features of proposed reclamation projects are submitted to the Corps of Engineers for review and determination of the flood control benefits. Corps representation is required for cooperation with Federal and state agencies such as River Basin Compact Commissions; Interstate River Basin Compacts; and Regional Planning Commissions in authorized, but unfunded investigations. Funds are also used to support Corps participation in the North American Waterfowl Management Program. These funds will be used to continue cooperation with Federal and State agencies, and non-Federal interests in support of the NAWMP administered by the Department of the Interior, Fish and Wildlife Service. The NAWMP is an international program designed to reverse downward trends in North America's waterfowl populations by protecting and improving waterfowl habitats nationwide, particularly in 34 areas within the United States identified as being critical to meeting NAWMP goals and objectives. Department of the Army support to the NAWMP is set forth in an agreement signed with the Department of the Interior on January 23, 1989. Funds are also used to support participation in the National Estuary Program. These funds will be used to participate with Federal and State agencies in the National Estuary Program (NEP) administered by the Environmental Protection Agency under the Water Quality Act of 1987 (Section 320 of PL 100-4). The NEP is an interagency planning program to develop management plans for nationally significant estuaries designated by the EPA. Because of extensive Corps involvement with Federal water resources projects in the nation's estuaries and other responsibilities in waters of the U.S., the Corps participates on the management and technical advisory committees of those NEP estuaries being studied. The requested funds would be used to cover costs of Corps field office meeting attendance, field reconnaissance, and data transfer. These funds will also be used for district staff to represent USACE at Regional Planning Bodies (RPBs) under the auspices of the National Ocean Council and work with our state and local partners to assure that their concerns are addressed at these meetings. Districts included are New England District for the Northeast Region, Jacksonville District for the Caribbean, Honolulu District for the Pacific Islands, and Alaska District for the Alaska/Arctic Region.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0.
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

The Gulf of Mexico Program (GMP) request is $100,000 2/ to continue the Corps' participation in the GMP. Funds will be used to support participation by Corps personnel from Gulf districts/divisions in the execution of the Corps' effort to advance the Regional Sediment Management (RSM) and Community Awareness components of the Gulf of Mexico Alliance - Governor's Action Plan II. The GMP/Coastal America partnership uses a cross-cutting collaborative approach to formulate and implement creative, place-based, non-regulatory solutions to economic and environmental issues with Gulf-wide and national implications. Funds will also be used to support participation by Corps personnel from the Gulf districts and ERDC in the execution of the Ocean Action Plan: Gulf of Mexico Alliance - Governor's Action Plan II as follows: 1) refining/calibrating sub-Gulf coast regional sediment models in support of producing a set of Gulf regional sediment management models that; 2) will be used in conjunction with the Gulf Regional Sediment Management Technical Framework Final Report, dated – December, 2010, to formulate recommendations and guidelines for implementing Gulf regional sediment management to be included in the Gulf Regional Sediment Management Master Plan (GRSMMP); and, 3) engage in addressing Community Resilience (CR). The bulk of the requested funds will be used to execute specific Corps commitments found in the Gulf of Mexico Alliance Action Plan II in support of the Alliance's GRSMMP and CR efforts. Funds will also be used to: 1) coordinate with Corps district, Engineer Research Development Center, and Institute for Water Resources personnel to advance RSM and CR efforts, and 2) manage the requested funds. The total dollars estimated to be carried in from prior appropriations for use on this study is $0. This amount, together with the "Budget for FY 2014" shown above, will be used to perform the FY2014 study activities.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Allocation in FY 2013	Budgeted Amount in FY 2014
$	$
500,000 2/	500,000 1/

Interagency and International Support
Interagency & International Support Division, Headquarters USACE

The Interagency and International Support request is $ 500,000 to allow the U.S. Army Corps of Engineers (USACE) to support other Federal agencies, international organizations and foreign governments to address problems of national significance to the United States under the authority of Section 234, Water Resources Development Act (WRDA) 1996 and to collaborate with other countries and international organizations on water resources and related matters. The 2012 Intelligence Community Assessment "Global Water Security" concluded that "During the next 10 years, many countries important to the United States will experience water problems…that will risk instability and state failure, increase regional tensions, and distract them from working with the United States on important US policy objectives." The Corps of Engineers has widely recognized expertise and experience in water resources, infrastructure planning and development, and environmental protection and restoration. Other Federal agencies, particularly the Department of State (DOS), the U.S. Agency for International Development (USAID), and international organizations such as the World Bank and the United Nations often request USACE involvement in interagency and international task forces, training courses and workshops to provide technical assistance in their strategic interactions with other nations. Recent Quadrennial Reviews for Department of Defense, DOS, and USAID have emphasized whole-of-government approaches, and water security is a recurring theme in these reports. Through these interactions, the Corps' abilities to perform its civil works mission and promote national security interests, especially those related to stability objectives, are also enhanced.

Fiscal Year 2013 funds are being used to support the following activities:

(1) USACE plans to continue its multilateral engagement with the United Kingdom, the Netherlands, Japan, Brazil, China and other nations by the sharing of technical knowledge on: flood risk management methods and tools, approaches for integrated water resources management (IWRM) at the river basin level, and incorporating water resources adaptation strategies for climate change as applied to water management and systems operations.

(2) Support through the Corps' International Center for Integrated Water Management (ICIWaRM), under the auspices of UNESCO. Activities include:

(a) Technical coordination and management of the US National Committee for the UNESCO International Hydrological Programme (IHP), of which USACE is an agency member, and through which it collaborates with other Federal agencies such as USGS and NASA on IHP activities.

(b) scientific interaction with UNESCO's global and regional water centers, including those for which the Corps has Memorandums of Understanding (MOU's): Center for Arid and Semi-Arid Zones in Latin America and the Caribbean (CAZALAC); Institute for Water Education (IHE); International Centre for Water Hazard and Risk Management (ICHARM), Centre for the Sustainable Management of Water Resources in the Caribbean Island States, and other UNESCO water centers and IHP initiatives. Activities in FY 2013 will tentatively include
* a joint workshop with CAZALAC in the Dominican Republic on the US of the Corps' drought management program ICI-Raft; and
* a joint meeting on Ecohydrology, Biotechnology and Engineering: Harmony between Biogeosphere and Society in collaboration with the European Regional Centre for Ecohydrology, under the auspices of UNESCO.

(c) Support of USG interests by providing training and capacity development for water managers and technical assistance for water security in developing and emerging nations, with focus-area initiatives in Africa, Latin America & the Caribbean, the Middle East and Asia. . Activities in FY 2013 will tentatively include a workshop on HEC models with CAZALAC in the Dominican Republic and/or Argentina.

(d) Global Technical Secretariat for UNESCO's semi-arid regions water program "G-WADI"; many of the world's trouble spots are in arid or semi-arid regions. G-WADI and UNESCO are co-organizing a two-part meeting in July 2013 (–3-5 JULY) to discuss Hydrologic applications, data challenges and remote sensing opportunities as part of the UN International Year of Water Cooperation (2013), for which UNESCO is the lead. The meeting will discuss strengthening and integration of UNESCO products within the framework of G-WADI and the International Drought Initiative.

(e) Support to Department of State Lower Mekong Initiative : Workshop on Alternative Decision Making Process for Water Resource Management in the Nam Kam River Basin. A team, organized by USAID, assisted the Thai National Mekong Committee in a three-day training workshop held in northeastern Thailand, on November 5-7, 2012. The workshop discussed plausible scenarios for water supply, demand and quality for the Nam Kam River Basin and how these might impact different stakeholders. A key participant in the workshop was the Nam Kam River Basin Committee. USACE jointly facilitated the event with Rajapat University and Kasetsat University, Sakon Nakhon, and the Thai National Mekong Commission. Follow-up workshops to the Thailand Workshop on Strategic Scenario Planning: a scoping mission, probably in late March, targeting a national scenario planning workshop for Cambodia in June 2013. There are two possible watersheds to be used for as a case study: The 4P watershed in Mondulkiri and the Strung San is in Kampong Thom. Both of these are potential Mekong ARCC sites so we will have complementary climate change data.

(2) Collaboration with the Netherlands Rijkswaterstaat (RWS) to continue to gain knowledge from the Dutch in a number of areas. This exchange, initiated in FY 2005, has been particularly useful in the wake of our coastal hurricanes. Thrust areas that have been mutually identified include: Dredging, Coastal Zone Management, Risk and Reliability and Navigation.

(3) Corps water resources technical exchange of information with Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLITT). Under the terms of the 2008 agreement on cooperation (to be extended in 2013). USACE and MLITT alternate with formal annual visits to each agency in addition to other periodic interactions. The agreement has not only fostered the exchange of water resources technical and management information, but also may be considered part of the growing relationship on cooperation on addressing large scale disasters, improving water conditions that lead to country stability, and the overall US-Japan relationship so important to our security interests in Asia.

(4) World Water Council (WWC). The Corps is on the Board of Governors of the World Water Council, which was established in 1996 in response to increasing concern from the global community about world water issues. Several International WWC meetings are held each year culminating in a World Water Forum (WWF) held every three years. USACE has a leading role in the planning already underway for the 7th World Water Forum scheduled for 2015 in Korea.

(5) Support to the Department of State on engagements related to the Mekong (S.E. Asia), Nile (Africa), Tigris-Euphrates (Middle East), Indus (Central Asia) and other international river basins as requested.

(6) Support to the Department of State with technical assistance for water resources development in Pakistan, Yemen and Syria.

(7) Efforts to establish a USACE technical support agreement with the Panama Canal Authority

(8) Alliance for Global Water Adaptation (AGWA): Water management is the principal medium through which projected impacts of climate change will be felt and ameliorated and guidance is needed for engineers and planners that are required to make decision now about an uncertain future. The AGWA project seeks to advance a practical approach to guide international and domestic engineers and planners in decision making under uncertainty for water resources management. ICIWaRM provides technical leadership to the following AGWA working groups: (1) economic and finance, (2) hydro climate, and (3) engineering and ecology.

(9) U.S. Water Partnership. ICIWaRM has been a core partner within the US Water Partnership - for which the State Department was one of the five founding members. We have provided in-kind services of a senior water professional (approximately 20%) to provide guidance in the development of their IWRM and informational programs. We also lead two of the three "signature initiatives" chosen by the USWP for implementation.

(10) A new Africa Initiative, to bring US Government agencies, universities and international organizations together to solve flood and drought challenges in Africa. Africa, like much of the world, suffers greatly from floods and droughts. Unlike many regions, the ground-based network of precipitation, soil moisture and stream gauges in Africa are generally sparse, making the prediction and monitoring of hydrologic extremes highly difficult. In addition to helping develop tools to address this challenge, ICIWaRM is also sponsoring an Embassy Fellow in 2013 to work on developing programs for Lake Chad. Along with USACE, five other US Government agencies—NASA, NOAA, USAID, NSF and the State Department—have contributed to one or more of these sub-initiatives.

Fiscal Year 2014 funds will be used for continuation of the activities listed above and the following proposed activities:

(1) ICIWaRM proposes to hold its second, mandated Advisory Board meeting.

(2) Thai and Cambodian workshop on Strategic Scenario Planning. Follow-up workshops to the Thailand and proposed Cambodian workshops on Strategic Scenario Planning in the Lower Mekong. This is in support of USAID and the State Department's Lower Mekong Initiative.

(3) Indonesia Integrated Water Resources Development (IWRD): In partnership with the Coordinating Ministry of Economic Affairs, Republic of Indonesia, USACE proposes to assist the Government of Indonesia with Integrated Water Resource Development (IWRD) to support further implementation of key components of Law No.7/2004 on Water Resources. In particular, USACE can support the Government of Indonesia, which visited the United States in May 2012 as part of the U.S. Water Partnership Program, overcome current and future water resource challenges through Shared Vision Planning (SVP) and Integrated Water Resource Management (IWRM) practices.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0 . This amount will be used to perform work on the study as follows: N/A .

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Coordination Studies With Other Agencies

	Allocation In FY2013		Budget Amount For FY2014	
Other Coordination Programs (Continued)	$955,000	2/	$955,000	1/

(f) The Interagency Water Resources Development budget amount is $955,000. Funds are included for Corps of Engineers district activities, not otherwise funded that require coordination effort with non-Federal interests. These activities include items such as meeting with City, County and State officials to help them solve water resources problems when they have sought advice or to determine whether Corps programs are available and may be used to address the problems. This will also cover costs of meeting with potential study sponsors before studies are budgeted to insure they understand study cost sharing and to obtain an indication of their interest in participating in a future study. Funds are included to provide support to the American Heritage Rivers program based on Executive Order 13061, dated 11 September 1997 and to provide support to the Coastal America Partnership. Funds are also included facilitate regional interagency coordination, including funds to sustain the benefits of the Great Lakes Habitat Initiative to continue multi-jurisdictional coordination, enhance decision-support capability, improve and advance monitoring..

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0.

2/ There 2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Coordination Studies with Other Agencies

Other Coordination Programs (Continuing)

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
National Dam Inventory	$ 400,000 *2/*	$ 400,000 *1/*	$ 0

AUTHORIZATION: Section 215 of the Water Resources Development Act of 1996 (Public Law 104-303) authorized $500,000 to be appropriated each fiscal year for the maintenance and publication of the National Inventory of Dams (NID). This authorization was continued in the Dam Safety Act of 2006 (Public Law 109-460).

The Inventory was initially compiled in 1975 has been periodically updated to reflect construction of new dams, changes in ownership, major modifications to existing dams, decommissioning and removal of dams, and improvements in the data accuracy and completeness. The current database includes 83,897 dams, and focuses on current internet technology to improve the ease of use, accuracy, and accessibility of the data. Annual funding is used to implement improved information flow and data quality control processes, to greatly enhance the state of knowledge management for dam safety. The importance of continued maintenance and publication of the NID has increased. The inventory is now required for use by the Secretary of Homeland Defense and the National Dam Safety Review Board in the allocation of dam safety program assistance funds to the various states in proportion to the number of dams in the state. Inventory data is also included in the biennial report to Congress on the National Dam Safety Program. The Inventory also plays an important role in the identification of infrastructure in risk due to terrorist activities. The ongoing maintenance and publishing of the NID is a coordinated effort involving data from the federal and non-federal dam safety community in cooperation with the Interagency Committee on Dam Safety and the Association of State Dam Safety Officials.

PROPOSED ACTIVITIES FOR FY 2014: These funds will be used for continued maintenance and publication of the NID. During 2014, a request will be made to the state and federal dam safety agencies to provide their entire dam inventory using the web-based application. During FY2014, the inventory web site will continue to be improved utilizing the Geographic Information System (GIS) interface, and integration with other dam and levee safety resources. The web-based NID submittal tool will also be improved and modified to allow greater ease of updating the national dam information from federal and nonfederal dam safety agencies.

ACCOMPLISHMENTS IN PRIOR YEARS: An updated inventory was published during 2013 based on the condition assessment data provided by the state and federal agencies during 2012. As a result of this data collection, more than 60 percent of the high hazard potential dams included in the NID contain an assessment of the dam based on the last inspection. Routine maintenance continued on the inventory along with providing an internet based, search-able inventory available to all federal, state, and local government agencies and the public. During calendar 2012 there were over 1,000,000 internet inquiries to the inventory, more than 1,800 account requests and an average of 15 users per day accessing the site.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

1. Surveys

Coordination With Other Federal Agencies, State, and Non-Federal Interest Other Coordination Programs

The Corps' FY 2014 request for Lake Tahoe is $100,000 2/. This funding is required to continue work associated with the Lake Tahoe Federal Interagency Partnership as directed in Executive Order 13057. The Federal Interagency Partnership is working with state and local agencies and public interest groups to arrest further deterioration of Lake Tahoe while maintaining a viable economic climate. FY2014 activities will include:

- $100,000 for full active participation in Partnership Activities (includes working with local and state agencies, public advisory committees, Southern Nevada Public Lands Management Act (SNPLMA) program participation, and staff work to support District, Division and HQ executive level involvement).

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Coordination Studies with Other Agencies

Other Coordination Programs (Continued)

(k) The Pacific Northwest Forest Case Study request is $10,000 2/.

The Northwest Forest Plan (NFP) is an interagency program, initiated by the White House's Council of Environmental Quality, for ecosystem management of the public lands in the Pacific Northwest within the range of the Northern Spotted Owl. In FY 1999, the Corps of Engineers (Corps) became an official signatory agency to the NFP Memorandum of Understanding. The NFP institutes an interagency approach for restoring and protecting animal and plant species on public lands and provides for economic assistance to impacted communities. With the funds requested, the Corps will continue partnership with Mt. Baker-Snoqualmie and Olympic National Forests, other Federal agencies, local Watershed Councils, and state and tribal forums and workshops; and participate on the Provincial Advisory Committees for the two National Forests. The Corps will provide technical support for a report describing the feasibility and time requirements for collecting study data, and initiate a summary report on the Engineered Log Jams (ELJ) constructed by the US Forest Service. NFP funding will enable the Corps to continue to work cooperatively with its other Federal NFP partners (USDA Forest Service, Bureau of Land Management, US Fish and Wildlife Service, National Marine Fisheries Service, National Park Service, Environmental Protection Agency, Bureau of Indian Affairs, and Natural Resource Conservation Service) and the State of Washington. NFP participants are presently concentrating on the development of coordinated Implementation Monitoring and Effectiveness Monitoring Programs while continuing to refine and implement its watershed ecosystem management strategies. The NFP presents the best opportunity for the Corps to expand its involvement with the other agencies of the Federal and State communities to use all of our engineering and environmental capabilities to address many of government's missions.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Coordination Studies with Other Agencies

Other Coordination Programs

	Allocation in FY 2012	Allocation in FY 2013	Budget Amount for FY 2014
Study Name: Special Investigations	$1,368,000	$1,350,000 2/	$1,350,000 1/

AUTHORIZATION: : Investigations of limited scope, in replying to requests from sources outside the Corps of Engineers, for information relating to unauthorized projects and other activities which have no funds, and which are not accomplished with a view toward determining whether a project can be developed. Also included is work specifically authorized by the Chief of Engineers; the review of reports and Environmental Impact Statements requested by other agencies, unless otherwise provided for; and attendance at meetings of local interests and other agencies during the preliminary stages of project investigations.

PROPOSED ACTIVITIES FOR FY 2014: Funds will be used to support efforts on requests from sources outside the Corps of Engineers, for information relating to unauthorized projects, flood risk management business line tasks and other unfunded activities, attendance at meetings of local interest and other agencies during the preliminary stages of a project .

ACCOMPLISHMENTS IN PRIOR YEARS: Funds were used to respond to various special requests by local interests for investigating flooding, erosion, and potential ecosystem restoration at multiple locations and attendance at meetings of local interest and other agencies during the preliminary stages of a project.

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1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
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APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Collection and Study of Basic Data

Other programs – Special Investigation

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
FERC Licensing	$ 200,000 *2/*	$ 200,000 *1/*	$ 0

AUTHORIZATION: The Corps of Engineers conducts reviews of Federal Energy Regulatory Commission (FERC) preliminary permit and license applications for development of hydroelectric power at Corps of Engineers and/or non-Corps projects. This work was funded under a different budget line item until 2012.

The Corps of Engineers conducts reviews of applications for Federal Energy Regulatory Commission (FERC) preliminary permits and licenses, under the authority of the Federal Power Act. Review of applications for preliminary permits and licenses filed with FERC for development of hydroelectric power at Corps of Engineers projects or at non-Corps projects to ascertain potential impacts on Corps of Engineers' responsibilities and mission. Also, the Corps reviews applications for surrender or termination of licenses to ascertain impacts on Corps' responsibilities and mission. Funds are used for the various Districts to review several applications per year and to prepare the response to the Division and Headquarters at the end of each fiscal year. Every year request for funding has been consistently increasing for this work effort.

PROPOSED ACTIVITIES FOR FY 2014: These funds will be used by various Districts of the Corps of Engineers for review of several FERC licenses applications. Approximately, 100 applications will be reviewed at the District levels that provided valuable services to UASCE multipurpose projects and meet the Nation's sustainability goals of meeting its energy needs from renewable resources.

ACCOMPLISHMENTS IN PRIOR YEARS: These funds were provided to various Districts of the Corps of Engineers for review of several FERC licenses applications. Approximately, 80 applications were reviewed at the District levels that provided valuable services to UASCE multipurpose projects and meet the Nation's sustainability goals of meeting its energy needs from renewable resources.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Coordination Studies with Other Agencies

	Allocation in FY 2012	Allocation in FY 2013	Budget Amount for FY 2014
Study Name: Planning Assistance to States	$5,284,000	$4,000,000 2/	$4,000,000 1/

AUTHORIZATION: Section 22 of the Water Resources Development Act of 1974, as amended, which authorizes the Secretary of the Army to assist States, local governments, Indian tribes, and other non-Federal entities in the preparation of comprehensive plans for the development, utilization, and conservation of water and related land resources. The studies are cost-shared on a 50% Federal, 50% non-Federal basis. The program can encompass many types of studies dealing with water resources issues, including environmental conservation/restoration, wetlands evaluation, water supply and demand, water quality, flood damage reduction, flood risk management, coastal zone management, navigation, and dam safety. This program provides a means of working with partners on broad water resources matters of interest to them and outside planning and authorization for site-specific studies and projects. It is a primary resource for the interagency Silver Jackets teams. Use of the Planning Assistance to States program to achieve common interagency and inter-governmental flood risk management goals optimizes the use of our and our partners' resources, providing the best risk reduction possible with available funds.

JUSTIFICATION: The Planning Assistance to States program has continued to evolve into a highly effective tool for providing technical and planning assistance to states, local governments, and Indian tribes. As more states develop and update hazard mitigation plans, watershed plans and floodplain management plans, this program provides the opportunity for the Corps to provide expertise. This program supports the initiative to facilitate pre-disaster and post-disaster assistance and Executive Order 11988. This program has been used to develop erosion control designs that a region continues to use today, which has improved water quality, helped with flood damage reduction and conserved significant water and related resources. The states, local governments, and Indian tribes recognize the need to develop locally directed solutions to their water resources problems, and this program continues to be a valuable resource.

PROPOSED ACTIVITIES FOR FY 2014: The FY 2014 amount will enable the Corps to provide much needed planning and technical assistance to assist in a wide variety of water resource efforts, including watershed activities benefitting environmental restoration, flood risk management, and other watershed resources. Program funds are distributed across the country for each of the Corps' Major Subordinate Commands (MSC) to assess, prioritize, and fund the needs of the MSC region

ACCOMPLISHMENTS IN PRIOR YEARS**:** In fiscal year 2012, the Corps of Engineers spent more than $8.3 million on 180 studies in most States, in the Pacific region and Caribbean Islands, and with Federally-recognized Indian tribes. These studies provided technical and planning assistance for a full range of water resources issues. Significant efforts involved studies to assist local communities in addressing their flood risk through flood hazard information reports, restoring urban river environments, and accomplishing wetlands identification and mapping studies. Efforts were undertaken to assist states and local governments in flood damage reduction, ecosystem restoration, drinking water supply and demand, and water quality.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A
The total unobligated dollars estimated to be carried into FY 2014 is 0. Description of work to be completed: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY11 $	Allocation in FY12 $	Allocation in FY13 $	Budgeted Amount in FY14 $
Project Name: Automated Information Systems Support - Tri-Service CAD/GIS Technology Center	349,000	335,000	350,000 *2/*	350,000 *1/*

Engineer Research and Development Center

JUSTIFICATION: All Corps districts use CAD and GIS computer systems for Civil Works engineering, design, mapping, planning, and facility management. Many now use BIM as an engineering and O&M tool. All engineering drafting tables have been replaced with CAD platforms or computer mapping systems and most Corps environmental and natural resource analysis are being performed on GIS platforms. The geospatial data standard efforts of the Center were coordinated with the American National Institute of Standards to develop a National GIS Standard that was approved in November 2001 and includes civil works and homeland defense features. Standards and productivity enhancement tools developed by the Center are used for both in-house and contractor produced drawings, maps and analyses, which assure that all Corps offices have the ability to exchange their work among themselves and with others, including the private sector. The Center is actively coordinating its A/E/C CAD Standard with the National Institute of Building Sciences' U.S. National CAD Standard, thus reducing the redundancy with the private sector, and reducing cost for both government and the private sector. In 2006, the Center began coordination and developmental support for the U.S. National BIM Standard. The BIM standard addresses the latest building information model technology within the US building and construction industry. The Center ensures that the Corps obtains the maximum return on its investment in BIM, CAD, and GIS by coordinating development efforts and distributing products to Corps offices. The BIM, CAD, and GIS systems at field offices achieve maximum productivity when they take advantage of the economies of scale offered by sharing the development and use of common data standards, procedures, and applications. This sharing is accelerated through a concerted effort by the Center, working with various field-working groups, to draw from field expertise and dissemination of this knowledge in the form of lessons learned and standards to benefit all Corps users. Comprehensive data standards supported by the Center permit government and industry users to produce equivalent designs, maps, and analysis on a variety of computer systems using commercial off-the-shelf BIM, CAD, and GIS software.

The $350,000 requested for FY 2014 will support over 2,400 users of BIM/CAD/GIS and facility management technologies for Civil Works projects.

PLANNED ACCOMPLISHMENTS FOR FY 2014

- Publish SDSFIE 3.1
- Publish SDSFIE 3.1 USACE adaptation
- Update USACE How-to Manual and Training 4. Phase 1 of USACE SDSFIE 3.x implementation
- Develop correlation matrix tool for A/E/C CAD Standard and SDSFIE
- Develop system architecture to host BIM models in a Cloud computing centralized repository
- Develop phase two of Building Information Modeling (BIM) Primer – "Life-Cycle" Process and Technology Innovation
- Publish USACE BIM Road Map Updates for Civil Works.

- Enhance BIM design templates to include modeling content to support Civil Works projects
- Publish AEC CAD Standard. Includes: (1) adapting the standard to incorporate changes in CAD technology, incorporate enhancements from the U.S. National CAD Standard, and needs of field users; (2) Updating DGN Library files, border files, and template drawings as necessary to support Civil Works engineering design mission

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Allocation in FY11 $	Allocation in FY12 $	Allocation in FY13 $	Budgeted Amount in FY14 $
6,186,000	957,000	1,000,000 2/	1,000,000 1/

Project Name: Coastal Field Data Collection

Engineer Research and Development Center

SCOPE: The Coastal Field Data Collection program systematically measures, analyzes, and assembles long-term coastal data that field offices use to accomplish the Corps mission in coastal navigation and storm damage reduction. These are critical, high quality data sets, nationwide or regional in scope, which support multiple projects, but which no single project would have the mandate or funding to collect.

AUTHORITY: The basic authority for the Coastal Field Data Collection Program is 33 USC 426a which originated with the River and Harbor Act of 1945, which originated in the River and Harbor Act of 1930. The latest Engineering Regulation governing the program is ER 1110-2-1406 dated 1990.

JUSTIFICATION: Inaccurate and insufficient observation data results in project design errors for coastal navigation and storm damage reduction. For example, wave data with a 20% error that are used to design a coastal rock structure will yield a 70% error in the stone size used to build the structure. Oversized stone makes initial construction costs much higher and undersized stone results in early failure and higher than necessary life cycle repair costs. Similarly, a 5-10 degree error in wave direction can result in an error, or even reversal, in predicted sediment transport, compromising the success of a regional sediment management strategy. Cost-effective mission accomplishment in the coastal zone requires accurate and complete data. Long-term data are required to determine climatic changes that may impact Corps projects. Lack of available high-quality observation data was highlighted as a critical issue by the Coastal Working Group of the Hydraulics, Hydrology and Coastal community of Practice in a Corps-wide survey on data requirements in 2009 and reinforced in 2012.

Field Research Facility, a long-term Coastal Observatory: Critical to measuring, analyzing and providing useful coastal data products for Corps districts is the collection of long-term, high-resolution data for improving project design and performance. The *Field Research Facility* (FRF) in Duck, North Carolina (http://frf.usace.army.mil), is a real-world coastal facility that collects a comprehensive suite of wave, current, meteorological, bathymetric, and topographic data, typically required, but often unavailable at a Corps project site. The facility is used to: evaluate oceanographic measurement techniques and equipment, collect high-resolution data during storms, and collect spatially and temporally-intensive long-term measurements required to better understand complex coastal processes and coastal climate. Collected data are made available online in real time to engineers and scientists in the Corps, other agencies (NOAA, NSF, Navy, USCG, USGS, etc.), universities, and the private sector. They are used for coastal research and for developing coastal engineering tools that predict wave environments and sediment movement affecting coastal projects, navigation safety, and dredging quantities. In addition the facility is serving as a testbed for evaluating and developing coastal numerical models (many models exist, but few have been rigorously evaluated).

Recent activities at the FRF have included the development and deployment of state-of-the-art lidar and radar systems for monitoring beach and nearshore changes in real-time including during storms; allowing highly accurate, temporally detailed observations. CLARIS, *the Coastal Lidar And Radar Imaging System*, is a mobile system for rapidly mapping the beach, both alongshore and offshore. RIOS, the *Radar Inlet Observation System*, is a radar-based system for remotely

mapping evolving inlet shoals in real-time for navigation safety and dredging activities. A permanently mounted Terrestrial Lidar system, which continuously maps the beach and breaking waves, captured the first ever hour by hour record of wave run-up and beach changes during Hurricane Irene as it passed Duck, NC in 2011.

As a unique coastal observatory, the FRF is a significant Corps contribution to the Integrated Ocean Observing System (IOOS) as specified in the President's Ocean Action Plan and authorized in the Integrated Coastal and Ocean Observation System Act of 2009 (PL No. 111-11).

PROPOSED ACTIVITIES FOR FY 2014:

Continue the long-term data collection program and support the data requirements of the real-time model test bed. This will be the 35th year of observations. These observations include maintaining the unique cross-shore array that extends from very shallow water offshore to -26m which is providing data to advance coastal wave modeling technology and coastal inundation predictions

- Continue the long-term morphologic survey program
- Operationalize CSHORE-C15 (or another morphologic model) to evaluate its performance in real-time using the IMEDS toolkit, developed by ERDC, to refine morphology evaluation metrics and model performance.
- Expand and continue to develop the applicability and software analysis tools for real-time, advanced coastal mapping techniques of dune, beach, and nearshore using radar and topographic lidar sensing techniques.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY 2013	Budgeted Amount in FY 2014
Environmental Data Studies (CONTINUING)	$75,000 2/	$75,000 1/

The Environmental Data Studies program includes general national or regional environmental data collection; support of field offices in the use of innovative information system technology, including geographic information systems to demonstrate the relationship between project-funded environmental activities with national or regional environmental issues. Environmental data includes biological, physical, and/or cultural resource components. The access to data systems that house information is both intra- and interagency, involving all concerned Federal agencies, notably the US Fish and Wildlife Service, National Oceanic and Atmospheric Administration, US Geological Survey, USDA Forest Service, Natural Resources Conservation Service, Environmental Protection Agency, as well as State fish and wildlife and natural resource agencies, and non-governmental organizations like NatureServe. Coordination with other USACE data systems (e.g., CorpsMap) will ensure compatibility of uses.

PROPOSED ACTIVITIES FOR FY 2014: The funds requested in FY 2014 are to continue the Environmental Data Studies Program and to improve the efficiency with which District staff assemble and analyze environmental information for Civil Works projects. Funds will be used to support the access and sharing of environmental information for national and regional inventories and assessments and train field personnel in its access and use. Query links between the environmental data system and integrated Budget Evaluation Tool (iBET) will be developed to provide seamless, efficient flow of information to support programmatic decisions. The aim is to reduce costs, avoid duplication, improve procedures for complying with environmental statutes, and focus on environmental issues of national and/or regional significance.

ACCOMPLISHMENTS FOR FY 2013: Activities in FY 2013 included the development of a geospatial data system and its transition to full deployment. Training and support to Districts on environmental data were provided.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

	Allocation in FY 2013	Budgeted Amount in FY 2014
Flood Damage Data Program (CONTINUING)	$220,000 2/	$220,000 1/

AUTHORIZATION: Section 904, WRDA 1986 (P.L. 99-662); Section 308, WRDA 1990 (P.L. 101-640)

The Flood Damage Data Program is required to facilitate the collection and maintenance of basic flood damage data to support Corps field offices in accomplishment of flood damage reduction studies. Planning and evaluation of flood damage reduction projects requires knowledge of actual damages caused to various types of properties. The relationships between flood depth, flood duration and velocity, value and type of property, and the amount of damage are essential to making accurate and supportable estimates of the value of projects. The distributions of damages resulting from the various factors involved are needed for the risk analysis framework adopted for water resource studies. Damage data are obtained in rare instances when a damaging event occurs and funded studies are underway. However, in most instances when flooding occurs there are no current studies in the area or other funding mechanism to collect the requisite data to be used in future analysis or to report and accurately record the damages incurred and account for the effect of the factors that caused the damages. Previously no centralized flood damage data source existed which retrieved basic data for research efforts and for specific project studies. The major purpose of the program is to improve the technical quality and accuracy of flood damage data, to improve the understanding of the interrelationships of the characteristics of flooding on property damage, to improve the formulation of flood damage reduction projects, and reduce the costs of feasibility studies. Coastal damage data collection will be needed to adapt to new coastal protection policies and to respond to concerns from the Office of the Assistant Secretary of the Army (Civil Works) in the review of recent coastal protection projects. The activities of the program are to: (1) conduct actual flood damage surveys following flood events for riverine and coastal events; (2) develop, maintain, and improve the economic database for flood damage reduction projects; (3) calculate flood depth-damage functions for riverine and coastal flooding based on actual damage data; (4) collect data and derive damage relationships for roads, public building and facilities, and other public costs of flooding; (5) develop and maintain a floodplain inventory application that would be used to apply flood damage estimation models to feasibility, reconnaissance, and continuing authority studies; and (6) provide information to communities of hazard mitigation plans and grant applications.

PROPOSED ACTIVITIES FOR FY 2014: The funds requested in FY 2014 for Flood Damage Data would be used to update and maintain data collection survey forms and data collection techniques, to collect post-flood damage data, to employ the flood damage database to estimate National models where regional or local flood characteristics can be specified to estimate flood damage relationships, to update and maintain a geospatial computer application for floodplain inventory data. A model for estimating residential and nonresidential structure values would be field tested and expanded. Funds would also be used to facilitate the collaboration in collecting and sharing of flood damage data within the Corps and between other agencies. The results of damage function calculations would be particularly useful to communities applying for FEMA mitigation grants. Generic damage functions from the Flood Damage Data Collection Program are now imbedded in the FEMA Benefit/Cost Analysis Program for common use for grant applications. Funds would also be used to refine functions for estimating cleanup and relocation costs. Finally, funds could be used to develop and refine depth-damage curves for coastal areas, which is sorely lacking at present.

ACCOMPLISHMENTS IN PRIOR YEARS: Activities in FY 2013 include the collection of post-flood damage data, programming of a new version of IWR-GeoFIT that incorporates new structure valuation and depreciation procedures, providing technical support for IWR-GeoFIT, quantifying the statistical properties and variation in USACE estimated discount replacement values, performing a statistical comparison of inventory sources (RS Means and Marshall & Swift's Depreciated Replacement Costs) as well as techniques, releasing nonresidential damage functions, providing technical support for flood damage analysis, and beginning to develop damage functions for coastal properties.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Collection and Study of Basic Data

	Allocation in FY 2012	Allocation in FY 2013	Budget Amount for FY 2014
Study Name: Flood Plain Management Services	$9,110,000	$9,500,000 2/	$9,500,000 1/

AUTHORIZATION: Section 206 of the 1960 Flood Control Act (PL 86 645), as amended, which authorizes the Secretary of the Army to acquire, compile and disseminate data on floods and flood damage potential and to provide guidance in their use in flood related planning to State and local agencies.

JUSTIFICATION: This information and guidance has long supported planning and implementing actions that reduce flood risk through wise use of flood plains. The lessons of the gulf coast disasters and the concerns about the Sacramento levees have heightened concern and interest in increasing our focus on flood risk management and increasing and improving the Nation's awareness and understanding of actual flood risk exposure. As we better understand the risks we face, the need to provide accurate and timely flood risk information, interpretation, and guidance for coping with these risks is an ongoing challenge. Meanwhile, our local, State, Tribal and Federal partners continue to address similar issues, often independently. Program execution is efficiently leveraging existing intergovernmental State Silver Jacket teams to support State and local flood plain management priorities. Use of Flood Plain Management Services (FPMS) funds to achieve common interagency goals optimizes the use of our and our partners' resources, providing the best risk reduction possible with available funds. This program supports Executive Order 11988 as the federal governments' guidelines for pursuing activities that may impact the nation's flood plains. This program also fills a critical need as one of the few ways that small communities can access the expertise of the Corps. The Corps participates with the Federal Emergency Management Agency and local governments in the conduct of pre disaster hurricane evacuation and preparedness studies for mobilizing local community responsiveness to natural disasters in high hazard coastal areas.

PROPOSED ACTIVITIES FOR FY 2014: The funds requested for FY 2014 will enable the Corps to provide critical information and guidance to states and local communities in their application of flood plain management measures, optimizing use of our and our interagency partners' resources. It will provide site-specific flood and flood plain data and assistance; assist with efforts to identify flood hazards in communities under growth pressures; facilitate special studies that concentrate on the prevention of future flood damages, giving increased emphasis to the application of non-structural measures; communicate the existing risk and alternatives to address the risk; and enable critical pre-disaster hurricane evacuation and preparedness studies for states and counties along the Atlantic and Pacific Oceans, the Gulf of Mexico, and US islands in the Caribbean and Pacific.
This FPMS program for FY 2014 includes $3,000,000 to evaluate the potential for and encourage the use of nonstructural alternatives and actions on our Nations' major rivers during post-disaster recovery. The initiative would focus on two components related to implementation of nonstructural alternatives for managing flood risks: 1) assessing the potential for non-structural opportunities in our nation's watersheds and recommending incentives for increasing the use of non-structural alternative approaches in the development of new flood risk management projects and implementation during post-disaster recovery of flood risk management systems; and 2) use existing authorities within the Flood Plain Management Services program to provide technical assistance to non-federal, State and local agencies to assist and enable their development and implementation of a broader range of nonstructural actions to manage and reduce their flood risks. The Silver Jackets teams will be used to provide selected technical services and support to assist States and communities in the development and implementation of nonstructural alternatives and actions to reduce flood risks initiative.

The FY 2014 FPMS program also includes $1,000,000 for Systems Approach to Geomorphic Engineering (SAGE) Initiative. The purpose of the SAGE initiative is to (1) coalesce existing scientific knowledge and engineering experience on (a) "green" or "soft" or "living shorelines" solutions and (b) "SAGE" or "hybrid" combinations of "green" and "gray" solutions; (2) develop hybrid solutions for the different coastal landscape/ecosystems that contribute to good

flood plain management in the coastal zone on a regional scale; (3) propose field tests to be conducted through the Section 2038 authority of WRDA 07 to demonstrate the viability of proposed solutions and other research in both flood risk management and ecosystem restoration research programs; and (4) document the effectiveness of pilots and demos funded by other authorities. This SAGE effort will be accomplished in close collaboration with other agencies (especially NOAA and FEMA), non-governmental organizations (especially The Nature Conservancy and The Conservation Fund), academic institutions, and private sector firms.

ACCOMPLISHMENTS IN PRIOR YEARS**:** In FY 2012, $4.4 million was utilized for the base program of Corps district offices responding to requests for information in a timely manner. Another $6.3 million was utilized for 95 Flood Plain Management Studies and special programs in response to requests from Federal and non-Federal agencies, communities, Tribes and individuals for flood-related information, interpretation, and guidance. The requests continue to number into the tens of thousands and involve property valued at billions of dollars. Through 18 inter-agency Silver Jackets projects ongoing in FY 2012 at a cumulative Corps cost of $1.5 million, the Corps supported 18 states' flood risk management priorities within a shared responsibility approach that leveraged other federal and state resources and resulted in the provision of actionable flood risk information and implementable options to reduce flood risk. Collaborative accomplishments included flood forecast inundation mapping for communities at risk, development of flood response and warning plans, hazard communication and outreach assistance, hydraulic structure failure analysis, data development to support sustainable land use planning, and evacuation planning. Fifteen are expected to lead to actions by those who have the authority to manage flood risk and/or demonstrate that they will tangibly reduce or manage flood risk. Of the 18, 8 are expected to reduce future expenditures related to flooding and flood risk. The Corps participated in pre-disaster hurricane evacuation and preparedness studies for high-hazard areas in coastal states and territories; provided support for updating and improving mathematical models of flood plain hydrology and hydraulics; developed training programs in flood plain hydrology and hydraulics; and prepared flood-proofing studies.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A
The total unobligated dollars estimated to be carried into FY 2014 is 0. Description of work to be completed: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Collection and Study of Basic Data

Other programs – Special Investigation

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
Hydrologic Studies	$ 250,000 *2/*	$ 250,000 *1/*	$ 0

AUTHORIZATION: The scope of activities under this item is determined annually based on the requests from USACE Commands and Laboratories to meet high priority needs. These items are not covered under regular Civil Works GI and O&M funding programs. Major activities to be undertaken in the program generally include the collection of basic hydrologic data and the studies of these data for major storm events or certain special hydrologic processes. The information to be derived from this program will improve hydrologic engineering techniques for the planning, design, construction, and operation of water resources projects. The program consists of four sub items: Storm Studies, General Hydrologic Studies, Sedimentation Studies, and Stream Flow and Rainfall Data.

PROPOSED ACTIVITIES FOR FY 2014: 1. Storm Studies: The Storm Studies Program is a continuing investigation of major storms for the purpose of accumulating comprehensive rainfall data. These data are used to refine the regional hydrometeorological information throughout the nation. The up-to-date hydrometeorological information is essential for design of new projects as well as for safety assessment of existing projects. We have substantial need for hydrologic data for initiation and completion of water resources studies. These data are required in the evaluation of flood producing potentials of river basins, and constitute the major portion of the basic data used in probable maximum precipitation determinations. Funds in the amount of $50,000 will be required in FY 2014 to work on several storm studies. The need and capability in this area exceeds the requested budget amount. 2. General Hydrologic Studies: Studies under this sub item include needed improvement in the analysis of rainfall runoff relationships, flood frequency, snowmelt studies, hydrograph development and routing at selected watersheds, model calibrations in urban areas, analyses of past floods, methods for the hydraulic analysis of non-gaged streams, and other studies of related hydrologic nature. Also included are planned upgrades to the internal Corps system of accounting for gages used largely both of control of water resources projects and also for studies of major hydrologic events. Studies of new techniques to improve the accuracy of hydrologic modeling require additional resources. New radar applications in rainfall-runoff forecast is an ongoing need. Funds in the amount of $100,000 in FY 2014 will be required to continue this sub item at a level to insure proper and orderly progress. The need and capability in this area exceeds the requested budget amount. 3. Sedimentation Studies: The program is a continuing effort in which funds are used for conducting non project sedimentation studies, and for the Corps share of an interagency sediment investigation program. The sedimentation studies include: promoting and supporting the standardization and development of equipment, criteria and methodology for the collection, analysis of suspended and bedload sediment characteristics of natural streams; and laboratory studies. An amount of $50,000 in FY 2014 is required to continue the interagency sediment investigation program, regional sedimentation studies for high priority areas, develop database using all completed sediment survey in support of regional sedimentation studies. The need and capability in this area exceeds the requested budget amount. 4. Streamflow and Rainfall Data: This is a continuing program in which funds are used for installation and operation of hydrometeorology gages of non project nature that are needed by the Corps in addition to the stations in the cooperative programs conducted by the U.S. Geological Survey and the National Weather Service for the Corps. Additionally, gages are needed to observe historical high water marks for validation of hydrologic models. An amount of $50,000 in FY 2014 is required to continue the establishment and operation of these special purpose gages, and to determine historical flooding in urban sites. The need and capability in this area exceeds the requested budget amount

ACCOMPLISHMENTS IN PRIOR YEARS: 1. Storm Studies: During the period, the Corps has helped lead an effort to develop Extreme Storm Data to assist both the Corps and other federal agencies to meet design criteria for federal projects. Corps offices have gathered data on several major storms, reviewed the scope and interim results of ongoing studies by NWS on development of standard project and probable maximum storms at various basins throughout the United States and territories. 2. General Hydrologic Studies: Examples of some of the more important studies accomplished under this program are: determination of rainfall runoff relationship in urban areas; general hydraulic model calibration; snow cover surveys; and adaptation of hydrologic programs to CADD equipment. Work was completed on the regional frequency studies for Hawaii and data collection was initiated for the State of California. Significant work was also accomplished in assessing the effects of debris in hydrological modeling, particularly in the fire-prone western states. 3. Sedimentation Studies: All of the funds allotted to this sub item assisted in financing the Corps share of the cooperative Interagency Sedimentation Project at the Hydraulics Laboratory, Waterways Experiment Station. In addition, coordination with cooperating agencies was completed. 4. Streamflow and Rainfall Data: Stations funded under this sub item are generally established and operated several years prior to anticipated authorization for project type activities, in order to provide a background of observed data on which to base the planning and design of projects. Progress continued at these gage sites to collect hydrometeorological data in flood prone areas to document historical flood and calibration of hydrologic models.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Collection and Study of Basic Data

Other programs – Special Investigation

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
International Waters Studies	$ 200,000 *2/*	$ 200,000 *1/*	$ 0

AUTHORIZATION: The Boundary Waters Treaty of 1909, the Niagara River Treaty of 1950, the Columbia River Treaty of 1961, and other less formal agreements between the Governments of the United States and Canada are concerned with the regulation, control, and use of boundary waters. Under the Boundary Waters Treaty of 1909, the International Joint Commission (IJC) was established and empowered to establish local boards, which conduct investigations and assure adherence to orders of approval pertaining to use of boundary waters issued by the Commission. Corps of Engineers representatives serve on and chair the U.S. Sections of the following IJC Boards: Saint Croix River, Champlain Richelieu, Lake Champlain, St. Lawrence River, Niagara, Lake Superior, Lake of the Woods, Rainy Lake, Souris Red Rivers Engineering, Souris River Control, Kootenay Lake, and Osoyoos Lake. Under separate treaties, Corps representatives serve on and chair the U.S. Sections of the Columbia River Treaty Permanent Engineering Board, the Permanent Engineering Board Committee, the Columbia River Treaty Entities, the Columbia River Treaty Operating Committee, the International Niagara Committee, and the International Lake Memphremagog Board. These Boards and Committees hold joint meetings, review report drafts and correspondence, make field inspections, obtain, collect, and analyze hydrologic and hydraulic data, and report their findings to the establishing parties. The degree of study activity varies depending upon the requirements of the Commission or Treaty under which they were established. These efforts assure better control, use, and orderly development of the jointly controlled water resources, and are of importance in attempting to meet water demands resulting from an expanding economy along the United States Canadian border. Studies are closely related to the Corps of Engineers' Civil Works program and are summarized in the Assistant Secretary of the Army for Civil Works' Annual Report.

PROPOSED ACTIVITIES FOR FY 2014: The amount requested for FY 2014 will fund Corps of Engineers participation in assisting the U.S. Government meet its obligations under provisions of boundary water treaties and other international agreements between the United States and Canada. CELRD provides support for implementation of the Niagara Treaty of 1950 that governs the split of Niagara River Waters between the U. S. and Canada, and between the uses of the waters.

Northwestern Division engages in activities associated with implementation of the Columbia River Treaty and the Kootenay Lake and Osoyoos Lake Boards of Control. CENWD, together with Bonneville Power Administration and British Columbia Hydro annually develop the Assured Operating Plan and the Detailed Operating Plan for the Columbia River Treaty storage projects. Funds also are used to support the work of the Columbia River Treaty Permanent Engineering Board, including publication of its annual report to the Governments. North Atlantic Division is engaged in support of the Saint Croix River Board of Control and the Gulf of Maine Council on the Marine Environment. Work in the Saint Croix R. Basin involves retrieval and analysis of water data to assure compliance with IJC rules and annual inspection of dams and fish passage facilities.

The Corps will continue to carry out its multiple responsibilities to the various IJC Boards of Control and to the several Treaty entities, boards and committees. During FY 2014, additional flow data will be obtained and used to update the rating curve used to verify compliance with Niagara Treaty requirements. In addition, pursuant to the October 1999 Plan of Study for Lake Ontario regulation improvements, the IJC established the

Lake Ontario-St. Lawrence River Study Board. Investigations are continuing as the fifth year of a 5-year effort. A Plan of Study for evaluating the Lake Superior regulation criteria outflows is being developed for approval by Governments. A basin-wide hydrologic and regulation model will be implemented. Special studies related to international impacts of evaluation of endangered species compliance related to Columbia River Treaty projects will be continued by CENWD. CENAD will continue normal work in support of the Saint Croix Board of Control and the Gulf of Maine Council on the Marine Environment. Discussions are ongoing with the IJC on expansion of the IJC's mission to include environmental objectives, as described in the report entitled "The IJC and the 21st Century". The Corps will be supporting the IJC as it executes the reference from the governments regarding investigating the feasibility of establishing a demonstration watershed board and its implementation of the reference on diversion, consumption and transfer of international waters. The need and capability in this area exceeds the requested budget amount.

ACCOMPLISHMENTS IN PRIOR YEARS: The Corps Division and District commanders and their staffs met all of their many and diverse responsibilities in representing the United States on the previously listed IJC Boards of Control and Treaty entities, boards and committees. The IJC-sponsored special flood damage reduction study of the Red River Basin was closed without completing the full scope of the planned work because of lack of funds from the United States. CEMVD worked with the International Red River Board on the biota assessment for the Devils Lake basin and also supported an interagency modeling and review effort on the Red River of the North mainstem. CELRD has been very active in multiple Great Lakes IJC boards. CENWD continues to coordinate operations of Libby Dam under the 2001 Libby Coordination Agreement. CENWD participated as part of the U.S. Entity to prepare all Columbia River Treaty required Assured Operating Plans (AOP) and resultant Determinations of Downstream Power Benefits (DDPB). The U.S. Entity finalized the annual Detailed Operating Plan (DOP) that may produce results more advantageous to both countries for the current operating year.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Collection and Study of Basic Data

Other programs – Special Investigation

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
Precipitation Studies (National Weather Service)	$ 225,000 *2/*	$ 225,000 *1/*	$ 0

AUTHORIZATION: This is the Hydrometeorological Studies Program conducted for the Corps of Engineers by the National Weather Service (NWS). The Corps transfers funds to NWS who performs analyses of storm rainfall and other meteorological data required to develop hydrologic criteria for use by the Corps in planning, design and water control management of flood control and water resources development projects, and in floodplain management studies.

PROPOSED ACTIVITIES FOR FY 2014: The scientific services provided by the National Weather Service under this program consist of: (1) review of the meteorological aspects of storm data compiled under the Hydrologic Studies Program conducted by the Corps; (2) precipitation depth-duration-frequency estimates for regions and the nation; (4) development of meteorological parameters pertaining to hurricanes, northeasters and other wind phenomena; and (5) other studies necessary to accomplish the Corps mission. Funds in the amount of $225,000 will be required in FY 2014 to continue the program at a level consistent with Corps needs. The entire cost of the Corps hydrometeorological studies program is funded under this budget item.

With the technology and systems for updating precipitation frequency demonstrated, we now stand ready to update precipitation frequency estimates for the rest of the U.S. and its dependencies. With expected funding of $225K, efforts in FY 2015 will be to continue the update and revision of the precipitation frequency estimates for the portion of California not already included in NOAA Atlas 14 Volume 1 and continue studies for the U.S. Pacific Islands, Southeastern states, Midwestern states, and Alaska. Additionally, the NWS will be producing areal reduction factors for the U.S. and maintains the Precipitation Frequency Data Server web portal and prepares an annual report on nationwide flooding.

ACCOMPLISHMENTS IN PRIOR YEARS: With funding of $225,000 in FY12 and 13, the NWS completed the update of precipitation frequency estimates for the some states and initiated updates and revision of precipitation frequency estimates for the State of California, U.S. Pacific Islands, Southeastern states, Midwestern states, and Alaska Also, the Precipitation Frequency Data Server (PFDS) web portal was maintained with high availability. The annual report on nationwide flooding and associated assessment of damages was prepared and delivered.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Collection and Study of Basic Data

	Allocation FY2013 2/	Budgeted Amount for FY 2014 1/	Increase over FY14 and FY13
Remote Sensing/GIS Support	$75,000	$75,000	$0

AUTHORIZATION: Various authorities including Public Law 110–114. These efforts are necessary to provide remote sensing and geospatial data for efficient management of Congressionally authorized projects, to meet the performance requirements of the Presidents Management Agenda (PMA), to supply data for programs that are rated by the Program Assessment Rating Tool (PART), as well as to respond to specific public laws, including the National Levee Safety Program, the Government Paperwork Elimination Act (GPEA) and Clinger-Cohen/IT Management Reform Act.

This item supports the overall technology transfer requirement of the Corps Civil Works Program for Remote Sensing systems, which is the responsibility of the Engineer Research and Development Center (ERDC), through its Remote Sensing/Geographical Information Systems (GIS) Center of Expertise. The Remote Sensing/GIS Center is the USACE Center of Expertise for Civil Works Remote Sensing and GIS technologies, providing mission essential support to Civil Works programs. The Center provides cost-effective centralized management and support through technology transfer and applications development for Corps mission responsibilities in all business practice areas: navigation, flood and coastal storm damage reduction, hydropower, regulatory, environment, emergency management, recreation, water supply, and work for others. An enterprise GIS approach is an essential component of this support. Continuing interaction with other researchers and practitioners throughout the USACE, government, the private sector, and academia assures that state-of-the-art and state-of-the-practice knowledge of evolving trends that are relevant to USACE activities are available, and that duplication of effort is avoided.

Declines in manpower require working smarter, better, and faster. Contributing to this effort, the Center develops approaches for the integration of data from the disparate sources necessary for comprehensive and collaborative land and water resources management including: basin-wide studies; water control; support to emergency management; and compliance with the attendant environmental regulations and related policies. The Center promotes state-of-the-art sensors, data collection, analysis, and storage systems, building on commercial software, and integrating these with operational technologies which are then delivered to the USACE divisions, districts, and other agencies' activities. The Center provides guidance and technical support to the USACE Geospatial Community of Practice (CoP), including no-cost support to USACE elements having problems that can be solved in less than 3 days. The Center also provides supports to other CoPs requiring geospatial or remote sensing information, including the remote sensing, hydrology, hydraulics and coastal, levee safety and emergency management sub-CoPs. This ensures that appropriate linkage to the geospatial technologies is available.

The existence of the Center ensures that the necessary support can be rapidly directed toward solving operational problems that require specialized expertise. The PROSPECT training program in remote sensing and GIS, managed by Center staff, provides another avenue for the transfer of knowledge to those who are, or soon will be, using these technologies. Training also is conducted in the field through workshops, conferences, and distance learning. White papers, pilot projects, USACE and other publications, including Engineering Letters, Circulars, and Manuals, and the Internet, also are used to transfer procedures and lessons learned to end users.

PROPOSED ACTIVITIES FOR FY 2014:

- As the Center of Expertise, serve as key resource and technology point of contact for the Corps of Engineers for Civil Works remote sensing and GIS.
- Continue to expand GIS and remote sensing capabilities to maintain technical leadership for critical USACE programs such as the National Levee Database and HQ Unified Operating Center (UOC) during emergencies.

- Provide guidance and technical support to the USACE Geospatial Community of Practice (COP),
- Support one-stop service requests from USACE districts and divisions related to remote sensing and GIS.
- Provide technical support to USACE district offices for the development of implementation plans for geospatial data, including water control and closer coordination with other agencies.
- Provide leadership and technical support to strategic and enterprise USACE geospatial initiatives.

ACCOMPLISHMENTS IN PRIOR YEARS:

- As the Center of Expertise, served as key resource and technology point of contact for the Corps of Engineers for Civil Works remote sensing and GIS.
- Provided guidance and technical support to the USACE Geospatial Community of Practice (COP) and provided leadership to the remote sensing, hydrology, hydraulics and coastal, levee safety and emergency sub-COPs, which have technical issues that are related to the geospatial technologies.
- Supported one-stop service requests from Corps districts and divisions. For example, the high-profile National Levee Database and the Levee Inspection System were built on Center experience and knowledge.
- Provided leadership and technical support to strategic and enterprise USACE geospatial initiatives: District and Division E-GIS support; Missouri River Restoration Project; Corps Water Management System; Geospatial Operations and Maintenance Business Interlink (gORM) development and implementation; Real Estate Management Information System; National Inventory of Dams; Corps Project Notebook; Access to Water Data; Emergency Management Remote Sensing, GIS, and Modeling Group; Watershed Investment Decision Tool; and Hydrology and Hydraulics modeling software development and support team member.
- Provided technical support to Corps District offices for the development of implementation plans for geospatial data management including development of enterprise of geospatial data approaches. Conducted frequent geospatial technology web-seminars for Corps offices. This support includes discussions with district personnel concerning current and desired approaches, consideration of what is occurring in all divisions in the district, and enterprise issues.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Allocation in FY11 $	Allocation in FY12 $	Allocation in FY13 2/ $	Budgeted Amount in FY14 1/ $
50,000	48,000	50,000	50,000

Project Name: Scientific and Technical Information Centers

Engineer Research and Development Center

SCOPE:

Five information analysis centers (coastal engineering, cold regions engineering, concrete technology, hydraulic engineering, and soil mechanics) located at the U.S. Army Engineer Research and Development Center provide the major interface between the Corps of Engineers and the public and private sectors to gather and disseminate information as required by PL 99-802, Federal Technology Transfer Act of 1986. The function of each center is to acquire, examine, evaluate, summarize, and disseminate newly published scientific and technical information generated within the Corps of Engineers and other activities in the U.S. and abroad.

JUSTIFICATION:

Public Law 99-802, Federal Technology Transfer Act of 1986, requires technology transfer from Federal agencies to the private sector. In addition, both the Department of Defense and the Department of the Army have objectives of supporting the information needs of engineers and scientists and eliminating unnecessary duplication of R&D. The specified information centers, supported by their host laboratories, critically evaluate and summarize the technical validity and merits of published and unpublished research and technical publications on design, construction, or other technology utilization. User communities have been well established and distribution lists for technology transfer are continuously updated. Electronic media including the World Wide Web are used where appropriate. The effectiveness of activities and services is evaluated on a continuing basis, and technology transfer products and methodology are revised when appropriate. Priority for services will be given to deployed troops, Corps of Engineers staff, and other government personnel.

These centers are a major technology transfer resource between the public, the US scientific and engineering community, and academia for results of over 75 years of research results conducted by the ERDC laboratories in the fields of soil mechanics and foundation engineering, cold regions engineering, concrete technology, hydraulic engineering, and coastal engineering. Each center is supported by multi-disciplinary technical staff and has a comprehensive library of materials that have been published over the years. In a typical year, each Center responds to hundreds of information requests on subjects within its purview. These services are free to the users. In addition, services such as literature research, information synthesis, publication location, research reviews, and methodology comparisons on subjects of mutual interest to ERDC laboratories and other interested parties are available on a cost-reimbursable basis.

PROPOSED ACTIVITIES FOR FY 2014:

- Respond to several thousand technical inquires via various internet and personal contact actions. Inquires are received from Federal, state, and local government activities, universities, private sector engineers and scientists, and citizens.

- Provide technical expertise in the form of copies of reports, arranging to speak with an expert, furnishing generalized technical advice, or giving updates on technical developments.

- Digitize older ERDC research reports of significant technical value and place them on the internet for ready access by the public.

- Distribute reports, technical notes, computer programs, GIS data, abstracts, information bulletins, and other scientific and technical information to the Defense Technical Information Center (DTIC), Corps libraries, depository libraries, and identified user communities to ensure wide circulation and availability.

Information Analysis Centers	FY 2014
Coastal Engineering	$ 10,000
Cold Regions Engineering	10,000
Concrete Technology	10,000
Hydraulic Engineering	10,000
Soil Mechanics	10,000
	$ 50,000

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Collection and Study of Basic Data

Other programs – Special Investigation

	Allocation in FY 2013	Budgeted Amount for FY 2014	Increase over FY14 and FY13
Stream Gaging (U.S. Geological Survey)	$ 550,000 *2/*	$ 550,000 *1/*	$ 0

AUTHORIZATION: The Corps of Engineers cooperates with the U.S. Geological Survey in this effort, and contributes funds for all or part of the cost of the operation and maintenance of about 2,500 stations that are of special importance to the Corps mission. The Corps established this continuing, cooperative program in March 1928, so that streamflow data would be available to meet special needs concerning the Corps water resources responsibilities.

PROPOSED ACTIVITIES FOR FY 2014: The Corps of Engineers makes extensive use of streamflow records in the planning, design, construction, and operation of water resources projects. The Basic network of stream gaging stations operated by the Geological Survey under its normal functions without support from the Corps is inadequate to meet all the special needs of the Corps water resource development responsibilities. Accordingly, a cooperative program was established under which funds are transferred to the Survey to cover, partially, the cost of operating specific stations. In the optimum development and management of water resources, it is essential that continuous records of streamflow be maintained at specific sites over a long period of years to provide a reliable measure of water resources available for various uses. This budget item targets the non-project portion of the cooperative program. To continue the operation of stations of special interest to the Corps, an estimated total of $17,500,000 will be required by the U.S. Geological Survey during FY 2014, exclusive of funds received from other cooperative sources. The operation and maintenance cost of these stations will be financed from two sources, as follows: (1) $600,000 from this budget item for stations not directly attributed to the Corps projects; and (2) approximately $17,000,000 from Corps funds budgeted elsewhere for authorized projects and studies. The basic program will remain at the same level as in previous years. The need and capability in this area exceeds the requested budget amount.

ACCOMPLISHMENTS IN PRIOR YEARS: Records for the streamflow stations supported by transfer of funds are used primarily to operate Federal flood reduction projects. In the past ten years these projects have reduced flood damages by an average of $23 billion annually. Not only are these gages used by the Corps, but 100 percent of the data are used by the National Weather Service as the basis for its public flood forecasts. In addition, the data are published on the Internet by the Corps and/or in a regular series of reports by the U.S. Geological Survey and provide valuable information for many Federal and state agencies and the public.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY 2013	Budgeted Amount in FY 2014
Transportation Systems Program (CONTINUING)	$950,000 2/	$950,000 1/

AUTHORIZATION: Section 904, WRDA 1986 (P.L.99-662); Section 334, WRDA 1992 (P.L.102-580) Section 230, WRDA 1996 (P.L. 104-303)

The Transportation Systems Program supports Corps Districts and Headquarters in accomplishing navigation project planning and evaluating responsibilities through the provision of information and technical support. The process of planning improvements for waterway and harbor navigation projects necessitates consideration of needs, opportunities, benefits, and economic costs of project improvements in the context of the project-specific areas as well as the overall national transportation system. The Transportation Systems Program is managed by CECW-P through CEIWR and is a continuing effort to ensure the development of viable and practical analytical techniques, sources of information, tools and methods including the development of deep draft and shallow draft vessel operating and replacement cost data; provision of timely information regarding world deep draft vessel fleet, commodity, and cargo flow forecasts; the publication of reports documenting the results of research associated with the Transportation System Analysis Program; the provision of technical services and support to District and Division offices and Headquarters personnel. Goals include: (1) to improve the technical quality, accuracy and consistency of navigation planning studies and procedures; (2) to improve the strategic planning of navigation improvements; and (3) to reduce the costs of individual navigation studies through shared data and methodologies. The funding requested for FY 2014 will allow the program to conduct essential ongoing nationwide navigation studies.

PROPOSED ACTIVITIES FOR FY 2014: The funds requested in FY 2014 for Transportation Systems will be used to update deep and shallow draft vessel operating costs (VOCs). In addition, funds will be used to develop, review and distribute Great Lakes and oceangoing barge VOCs. Funds will also be used to estimate transportation cost reductions or efficiencies (i.e., benefits) for Corps navigation studies, retain trade and transportation forecast subscription services from Information Economics and Global Insight, and develop customized port-level trade forecasts through Global Insight's Trade Navigator service, as well as technical support from CEIWR staff for District and Division planners and economists to conduct navigation studies, and strengthen the Deep Draft PCX. In addition, there has been an urgent need to certify and standardize navigation models.

ACCOMPLISHMENTS IN PRIOR YEARS: Activities in FY 2013 include updating and distributing shallow and deep-draft vessel operating costs guidance including investigation of life-cycle hull asset costing procedures and practices; updating bunkerage costs with posting to HQUSACE homepage; analyzing load factor inputs and developing and certifying various navigation models.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

Project Name: Research and Development

Engineer Research and Development Center

Allocation in FY12 $	Allocation in FY13 $ 2/	Budgeted Amount in FY14 $ 1/
18,025,000	16,143,000	16,143,000

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

The Corps must pursue an aggressive R&D effort to take advantage of rapidly developing technologies and techniques that will promote significant monetary savings and greater reliability, safety, enhanced efficiency, and environmental sustainability in planning, design, construction, operations and maintenance of civil works activities.

The Civil Works R&D program is formulated to directly support the established Business Lines of the Civil Works Program including: flood and coastal storm damage reduction, inland and coastal navigation, environment (including natural resources, compliance, mitigation, restoration, and stewardship), water supply, hydropower, recreation, emergency management, and regulatory. The Civil Works R&D needs and requirements are identified based on the USACE Campaign Plan, Civil Works Program Strategic Plan, Corps SES and General Officer Steering Committee, division and district input, and the existing WRDA authorities. Corps R&D also must address the challenges facing the Corps' portfolio of water resources infrastructure; aging structures, changing demands, changing environmental conditions, and constrained budgets. Corps R&D examines new ideas, develops approaches, techniques, and technology to solve problems, and transfers field-ready products. The request for $16,143,000 of General Investigations funds for the FY 2014 program is focused on the very highest priority R&D needs. Additional high priority requirements identified above the base program by practicing District and Division technical experts and by HQUSACE proponents are incorporated into the program as funding becomes available. The FY 2014 program continues efforts started in FY 2013 that will lead to better management of water resources projects, promote public safety, reduce risk, improve operational efficiencies, sustain the environment, and position our water resource systems to be managed as systems and to be adaptable due to the implications of climate change. The Program also proposes in FY 2014 to begin a focused science and technology effort to address needs for resilient water resources infrastructure.

Results of the Corps' GI R&D are directly incorporated into practice within the Civil Works Program through revisions or additions to Engineer Regulations, Engineer Manuals, Technical Guidance Manuals, Engineer Technical Letters, or Guide Specifications. Numerous other means of technology transfer are also used such as training courses, workshops, demonstrations, technology availability in commercial tools and services, and other professional contacts. The Corps Civil Works R&D Program provides essential Product Lines with field ready end products and a high return on investment for the Corps, other Federal agencies and the Nation.

AUTHORIZATION: Authorization for ERDC to conduct R&D is codified in 10 U.S.C. 2358 ("The Secretary of Defense or the Secretary of a military department may engage in basic research, applied research, advanced research, and development projects that are necessary to the responsibilities of such Secretary's department in the field of research and development.")

COORDINATION:
The Corps conducts Civil Works R&D through the U.S. Army Engineer Research and Development Center (ERDC) and the Institute for Water Resources (IWR). The ERDC consists of seven research laboratories:

Coastal and Hydraulics Laboratory, Vicksburg, MS
Cold Regions Research and Engineering Laboratory, Hanover, NH
Construction Engineering Research Laboratory, Champaign, IL
Environmental Laboratory, Vicksburg, MS
Geotechnical & Structures Laboratory, Vicksburg, MS
Information Technology Laboratory, Vicksburg, MS
Topographic Engineering Center, Alexandria, VA

The IWR is located in Alexandria, VA, and it's Hydrologic Engineering Center (HEC) in Davis, CA. Policy guidance and executive oversight are provided by the Civil Works R&D Steering Committee co-chaired by the Director of Research and Development and the Deputy Director of Civil Works and comprised of CW division chiefs. The Director of Research and Development is responsible for developing the annual program. The Directors of ERDC and IWR are responsible for execution of the CW R&D program.

In order to most effectively use the limited R&D resources and to avoid unnecessary duplication of research effort, the Civil Works R&D Program maintains external technical exchange and technology transfer efforts with other Federal and major water resource agencies including the TVA, Bonneville Power Administration, Western Area Power Administration, EPA, NSF, Department of Agriculture (NRCS), Park Service, NOAA, DOI (USBR, Forest Service, FWS, USGS, DHS (USCG, FEMA, US Border Patrol), DOT (FHWA, FAA, MARAD), NASA, International Boundary Water Commission, International Joint Commission, DOE (NRC, FERC), the Navy, and state and local governments.

Corps researchers also maintain contact with the research activities of universities and industry through regular membership in such organizations as the American Society of Civil Engineers, the Civil Engineering Research Foundation, the American Concrete Institute, the American Society of Testing and Materials, the International Conference on Coastal Engineering, the American Association of Port Authorities, the American Society for Photogrammetry and Remote Sensing, Society of Environmental Toxicology and Chemistry, the Coastal Society, the Offshore Technology Conference, International Society of Soil Mechanics and Foundation Engineering, U.S. Society of Dams, and International Committees on Large Dams, the International Association for Hydraulic Research, the Association of American Geographers, Western Dredging Association and the International Navigation Association. The Corps also participates extensively with the Transportation Research Board, the Water Science and Technology Board, and the National Research Council in coordinating and leveraging research activities.

The proposed FY 2014 R&D Program directly supports the Civil Works Business Lines, their mission requirements, and established performance objectives at project, watershed, or river basin scales. The technical foundation of the R&D program includes:

a. Navigation (including Hydropower)
b. Flood and Coastal Storm Damage Reduction (including Emergency Management, Water Supply, and Recreation)
c. Environmental (including Regulatory)

Navigation (including Hydropower)

The Corps provides inland and coastal navigation critical to the national economy and defense. Navigation research delivers environmentally sustainable products that improve efficiency, reliability, and capacity of this complex, aging transportation/power network. The research framework integrates infrastructure engineering, power physics, economics, innovative construction, coastal and riverine hydrodynamics and processes, monitoring and sensing technologies, operations research, environmental solutions, and emerging technologies to create effective solutions in concert with the multiple demands, requirements, and constraints of real world commodity transport and power production problems. Research efforts target navigation channels, locks, jetties, breakwaters, harbors, dams and power plants to optimize among life-cycle and reliability trade-offs, assure defensible economic assessment, and provide better investment decision tools for predicting performance and deterioration with time, and for scheduling and prioritizing maintenance and repairs balanced with the consequences of delays. Essential to this effort is the development of tools for determining the condition of infrastructure components to make risk-based prioritizations for funding. R&D efforts for development of condition index products include: Developing a standardized method and associated computer program for life-cycle engineering analysis of coastal rubble mound breakwaters, Improved Condition Indexing for Coastal Structures, Monitoring of Concrete Navigation Structures, Inspection and Condition Assessment of Steel Hydraulic Structures, and Condition Monitoring and Predictive Maintenance for Infrastructure. Significant investment has also been directed toward developing improved navigation economic technologies that can be used to support better-informed decision analyses and management of the United States inland and deep-draft navigation system.

Flood and Coastal Storm Damage Reduction (including Emergency Management, Water Supply, and Recreation)

Corps projects across the Nation prevent flooding and storm damage. In the daily and seasonal operation of hundreds of Corps projects, national requirements for water supply and opportunities for recreation and environmental stewardship are also balanced. The Nation expects the Corps to guarantee that its existing projects maximize efficiency and effectiveness, and that new projects incorporate the most advanced knowledge and capabilities in planning, design, construction, operation, and maintenance. Through R&D, the Corps develops technology that optimizes daily operations of water resources projects to meet multiple objectives, including water supply and environmental stewardship. The Corps' R&D creates new solutions to challenging infrastructure engineering problems in building, maintaining, upgrading, and operating the Nation's water resources infrastructure such as dams, locks, spillways, channels and levees. Through R&D, the Corps provides guidance and tools to understand the natural setting of water resource projects, to incorporate environmental & economic objectives, to manage flood risk, to assess alternative solutions, and to make optimal decisions. The technological requirements of emergency management are addressed to make possible the most rigorous planning and preparedness and the most efficient and effective response and recovery.

Environmental (including Restoration, Regulatory and Stewardship)

The Corps has ecosystem restoration and environmental stewardship and management responsibilities on more than 11 million acres of land and water resources. Due to the enormous scope of this mission, it is imperative that Corps field personnel be able to apply the latest technologies for ecosystem restoration and natural resource inventory. The scale of these activities ranges from large projects such as the Florida Everglades down to much smaller, local wetlands/stream restoration projects. The broad scope of these environmental activities (as well as the frequent changes to the legislative mandates that govern them) demands sound research and development to address these critical needs. The goal of this R&D is to provide cost-effective/innovative technologies for project planning, design, engineering/construction, and operation/maintenance. Product lines include Ecosystem Restoration, Ecosystem Functional Assessment (with an emphasis on Environmental Assessment and Evaluation), Environmental Stewardship, and Management. Products include concise, how-to guidance documents that provide rapid/low-cost technologies and methods for high priority field needs as well as sophisticated ecological process assessment models that are critical to the success of the Corps' Ecosystem Restoration business line.

PROJECTED CIVIL WORKS R&D FUNDING ALLOCATIONS (FY 2014)

BY RESEARCH AREA	FY 2014 ALLOCATION
a. Navigation (including Hydropower)	$ 6,328,000
b. Flood and Coastal Storm Damage Reduction (including Emergency Management, Water Supply, and Recreation)	$ 5,508,000
c. Environmental (including Regulatory)	$ 4,307,000
	$ 16,143,000

a. Commercial Navigation

Allocation in FY12 $	Allocation in FY13 $	Budgeted Amount in FY14 $
7,991,000	6,328,000	6,328,000

JUSTIFICATION:

The Corps' commercial navigation mission facilitates navigation through investments in waterborne transportation systems (channels, harbors, and waterways) that are cost-effective and environmentally sustainable. The U.S. Marine Transportation System (MTS) consists of over 300 ports, 1,000 harbor channels, and 25,000 miles of navigation channels. The MTS is already operating at near-full capacity in many areas and is being challenged by new vessel designs and traffic loads that exceed its channel, harbor, and lock capacities. Over 50 percent of the Corps' 191 lock sites (240+ locks) have been in service for more than 50 years. Research and Development (R&D) can help reduce the costs associated with delays due to closures for both scheduled and unscheduled repairs, as well as reduce the risk of catastrophic failure of a major infrastructure component.

This R&D area provides advanced and innovative tools and technology for the Corps to improve navigation functional performance, reduce unit costs, and improve safety. The Corps is expected to apply robust, reliable, and comprehensive capabilities to assess all impacts of alternative plans for projects and to select the most balanced and sustainable solutions. R&D delivers efficient and effective capabilities to plan, design, construct, operate, maintain, and upgrade transportation projects in inland and coastal locations and in all climates, from warm to ice-affected. Capabilities to improve system reliability are needed in an asset management framework to extend project life and reduce life cycle costs. Engineering and environmental aspects are integrated in the development of processes and design models, decision support software, infrastructure condition assessment techniques, risk frameworks, infrastructure and design guidance, and innovative monitoring, operation and maintenance technologies.

PROPOSED ACTIVITIES FOR FY 2014:

- **Keep the IMTS Locks Reliable and Resilient** R&D efforts to determine the condition, extend the life, and enable rapid repair of aging IMTS infrastructure.
    - o Research, develop, adapt, and test composite materials for appropriate navigation infrastructure applications.
    - o Enhance finite element modeling capabilities of locks and approach walls
    - o Expand Non-Destructive Testing capabilities for steel & concrete

$2.3M

- **Keep the Coastal Navigation Structures Reliable and Resilient** R&D efforts to determine the condition, extend the life, and enable rapid repair of aging and storm-impacted infrastructure.
    - o Develop a nationwide consistent navigation structure risk-based functional condition assessment
    - o Transition from expert elicitation condition index assessments with science and engineering based analysis capabilities and tools

$650K

- **Create new Engineering With Nature concepts and practice** Develop new science and engineering tools that support the synergy required to maximize the simultaneous production of environmental and economic benefits connected to navigation infrastructure and its operation.
    - o Design tools so that environmental benefits are “automatically” or most efficiently produced
    - o Develop the ability to design and predict performance of environmental features and enhancements that increase the resilience and performance of navigation infrastructure systems.

$1.2M

- **Connect Navigation Data with Data from Other Agencies** Develop a navigation data integration framework that sustains data lifecycle use and management of the range of data used for project operation and maintenance decision support
    - o Design and develop a distributed, service oriented architecture, including standards and data formats and protocols.
    - o Develop web based tools and capabilities to support and deploy the DIF.

$380K

- **Design an Efficient National Coastal Marine Transportation System** Create a new paradigm comprised of major ports, feeder ports, and regional intermodal freight movement. Develop a risk-based capability that incorporates coastal hazards and supply chain dynamics to predict regional scale navigation channel shoaling, navigation structure condition, dredging, and project maintenance requirements.
    - o Develop engineering and science-based tools incorporating sediment, flood, and wind hazards to predict future conditions
    - o Consider an economic tool that supports risk calculations.
    - o Design a framework of models and tools to support calculations and to couple models, communicate risk and visualize results.

$1.8M

ACCOMPLISHMENTS FOR FY 2013:

- **Keep the IMTS Locks Reliable and Resilient**
  - Researched, developed, adapted, and tested composite material for rapid repairs.
  - Enhanced finite element modeling capabilities of locks and approach walls
  - Expanded Non-Destructive Testing capabilities for steel & concrete

- **Keep the Coastal Navigation Structures Reliable and Resilient**
  - Initiated development of a nationwide consistent navigation structure risk-based functional condition assessment
  - Initiated transition from expert elicitation condition index assessments with science and engineering based analysis capabilities and tools
  - Enhanced quantitative risk-based structure condition assessments

- **Create new Engineering With Nature concepts and practices**
  - Designed tools so that environmental benefits are “automatically” or most efficiently produced
  - Developed the ability to design and predict performance of environmental features and enhancements that increase the resilience and performance of navigation infrastructure systems.

- **Connect Navigation Data with Data from Other Agencies**
  - Designed and developed a distributed, service oriented architecture, including standards and data formats and protocols.
  - Developed web based tools and capabilities to support and deploy the DIF.

- **Design an Efficient National Coastal Marine Transportation System**
  - Developed engineering and science-based tools incorporating sediment, flood, and wind hazards to predict future conditions
  - Considered an economic tool that supports risk calculations
  - Designed a framework of models and tools to support calculations and to couple models, communicate risk and visualize results.

b. Flood and Coastal Systems

Allocation in FY12 $	Allocation in FY13 $	Budgeted Amount in FY14 $
5,631,000	5,508,000	5,508,000

JUSTIFICATION:

The Corps of Engineers is responsible for more than 600 dams, operates over 400 major lakes and reservoirs, maintains 8,500 miles of levees, and has over 100 coastal storm-damage reduction and related projects associated with its Flood and Coastal Storm Damage Reduction mission. Flooding that occurs in the United States costs about $4 billion annually. Without the Nation's investment in flood and coastal storm damage reduction infrastructure through the Corps, that cost would be many times higher. Over the years, Corps flood protection projects have prevented an estimated $706 billion in damages, most of that within the last 25 years. The cumulative cost of building and maintaining these projects to date is $119 billion; therefore, every dollar spent on flood protection has prevented more than six dollars in damage. Despite this protection, annual damages in flood plains continue to rise due to changes in land use and urban development. In addition, the 2000 census showed that more than 50% of the U.S. population lives within 50 miles of a coast and is therefore vulnerable to dangerous coastal storms and costly flooding. Consequently, over the past several years, Federal shore protection expenditures increased to more than $100 million per year to protect the public and related economic investments.

The Corps manages existing water resources projects around the country to maintain a flood-protection infrastructure for the public's welfare. Simultaneously, the Corps balances requirements for hydropower, water supply, environmental stewardship, and recreation. As enabling technologies are developed, the Corps must upgrade and improve water resource projects, use the most advanced capability to assess the risk of alternative operational scenarios, and apply robust, reliable, and comprehensive capabilities to assess the economic and environmental effects of alternative plans for projects and to select the most balanced and sustainable solutions. R&D delivers efficient and effective capabilities to plan, design, construct, operate, maintain, and improve water resource projects in all climates and settings, from warm to ice-affected, and from inland to coastal.

Capabilities that prevent loss of life, minimize property damage, and reduce the life-cycle costs of projects are critical. These capabilities include advanced processes and design models, economic models and decision support software, infrastructure condition and risk assessment tools, infrastructure design guidance, innovative operation and maintenance technologies, flood-alert instrumentation and expedient emergency response capabilities, and the capability to take advantage of new real-time data sources (e.g. precipitation radar) to accurately forecast real-time flow and stages.

This R&D component provides advancements in hydrologic and hydraulic simulation, water resources project optimization, tools for effective alternative analyses for solutions, infrastructure safety, structural design and performance, and assessment of the risk and uncertainty associated with project designs. This R&D component also improves the technology available to emergency managers for emergency planning, preparedness, response, recovery, and assessment.

PROPOSED ACTIVITIES FOR FY 2014:

- **Emergency Management and Critical Infrastructure** R&D efforts to enhance national interoperable systems for use in emergency operations during floods and coastal storms
    - Continue efforts in data acquisition, analysis, and reporting capability for improved early warning
    - Create tools to aid USACE National Response Plan missions and contingency operations.
    - On-going assessment of water resources infrastructure projects technologies.

$1.6M

- **Coastal Systems** R&D efforts to support the Corps and stakeholder roles in sustainable coastal management
    - Further research into critical physical, social, and ecological processes unique to coastal and estuarine systems

- Improve prediction of coastal storm physical processes and affects on coastal systems, including tools for risk assessment and design parameter characterization.
- Develop tools to implement Engineering With Nature principles to mitigate the effects of storm surge and waves

$1.0M

- **Optimize Alternatives Analysis and Assess Project Risk and Uncertainty** R&D efforts to develop water resources project collaborative planning, risk assessment technologies, and decision support tools.
  - Improve decision support framework to evaluate alternatives with regard to system response to loadings, failure, and consequences (economic, social, and environmental).
  - New expedient methods for estimating damages prevented for flood risk management and coastal storm damage projects, life loss computation capabilities

$300K

- **Hydraulics and Hydrology and Integrated Water Resource Management Tools** R&D efforts to develop and enhance H&H tools in support of project planning, design and risk assessment
  - Enhance tools for planning and implementation of flood risk management and ecosystem restoration projects in highly urbanized watersheds.
  - Enhance models for integrated hydraulic, hydrologic, sedimentation, water quality and ecologic processes
  - Continued improvement of tools for multi-purpose project planning and implementation

$1.1M

- **Water Resources Infrastructure** R&D efforts to determine the condition, extend the life, and enable probabilistic analysis of aging infrastructure.
  - Continue efforts to determine the condition, extend the life, and enable probabilistic analysis of aging infrastructure.
  - Test and further development of methodology to account for seepage related events such as piping and internal erosion of earthen structures.

$1.5M

ACCOMPLISHMENTS FOR FY 2013:

- **Emergency Management and Critical Infrastructure**
  - Real-time or near real-time data acquisition, analysis, reporting capability via integrated data management systems for improved early warning
  - Technologies and tools to more effectively and efficiently implement USACE National Response Plan missions and contingency operations.
  - Rapid assessment of water resources infrastructure projects technologies.

- **Coastal Systems**
  - Researched critical physical, social, and ecological processes unique to coastal and estuarine systems
  - Reduced uncertainty of prediction of coastal storm physical processes and affects on coastal systems, and improved storm synthesis and analysis tools for risk assessment and design parameter characterization.
  - Linking or coupling of coastal, estuarine, and upland/riverine models and decision support tools for comprehensive multipurpose project planning and implementation.
  - Methodology and integrated framework of tools for comprehensive risk assessment of highly urbanized coastal floodplains including characterization of the hazard, failure, and consequences.

- Techniques and guidance for evaluating the mitigating effects of storm surge and waves using natural features

- **Optimize Alternatives Analysis and Assess Project Risk and Uncertainty**
  - Stochastic methods and decision support framework to evaluate project alternative measures with regard to system response to loadings, failure, and consequences (economic, social, and environmental).
  - Life loss computation capabilities for levee breaches
  - Expedient methods for estimating damages prevented, improved performance metrics and risk based performance metrics for flood risk management and coastal storm damage projects.
  - Evidence-based coastal storm damage functions and improved depreciated replacement values.
  - Determination of structure content values from secondary sources
  - Probabilistic lifecycle cost analysis methods and tools.
  - Hydraulic and hydrologic parameter analysis tools for risk and uncertainty assessment of H&H projects.
  - Enterprise coastal storm database and standard storm processing toolbox for planning, design, and emergency management.

- **Hydraulics and Hydrology and Integrated Water Resource Management Tools**
  - Engineering tools to address comprehensively pluvial, riverine, and coastal flooding for planning and implementation of flood risk management and ecosystem restoration projects in highly urbanized watersheds
  - Development/enhancement of 1-, 2- and 3-D models to simulate integrated hydraulic, hydrologic, sedimentation, water quality, and ecologic processes at various spatial and temporal scales.
  - Improvement of data management, integration frameworks, and decision support tools in support of multi-purpose project planning and implementation

- **Water Resources Infrastructure**
  - Effects of vegetation on levee performance
  - Guidance for application of in situ non-destructive and remote monitoring of earth structures, particularly levees.
  - Development of methodology to account for seepage related events such as piping and internal erosion of earthen structures.
  - Tools to adequately evaluate I-wall performance in differing environments

- Development of fundamental improvement to wave model physics using an unstructured and highly scalable wave model framework
- Development of a generalized code for optimizing application of joint probability analyses of coastal storm waves, water levels and winds for project design and risk assessment; extended the development of a proof-of-concept storm database and visualization tool to include storm analysis and simulation tools, and modeled storm data; provided linkage to FEMA databases allowing for data mining, plotting and analysis.
- Demonstrated baseline reservoir sedimentation assessment methodologies and provided improved guidance for reservoir sediment management.
- Published guidance document on prediction of risk-based project lifecycle performance for coastal projects
- Developed tool for conducting probabilistic lifecycle cost analyses for coastal projects.
- Developed risk-informed shore protection project performance metric to assess project performance in the context of actual damages and risk of future or expected damages prevented.
- Initiated development of methods and guidance for the quantification of hydraulic and hydrologic model uncertainty of existing and future flood risk management projects with a risk analysis approach based on changing physical, socio-economic and environmental conditions.
- Released improved hydraulic and hydrologic modeling tools for simulation of critical physical processes, including sediment transport, in integrated water

resource management applications
- Initiated development of detailed procedures, technologies, and methods for remote sensing and non-destructive testing of earthen water resources infrastructure
- Initiated research on the impacts of woody vegetation on the safety and performance of earthen levees
- Initiated development of soil-structure interaction database and tools for complete analyses of I-wall performance in a variety of environments
- Initiated development of procedures and guidance for risk-based assessment of embankment and foundation seepage and piping in earthen water resources structures.
- Developed mobile smart phone application for emergency response and management

c. Environmental

Allocation in FY12 $	Allocation in FY13 $	Budgeted Amount in FY14 $
4,403,000	4,307,000	4,307,000

JUSTIFICATION:

Since the Water Resources Development Act of 1986, there have been dramatic increases in authorized ecosystem restoration studies, projects, and programs. At the same time, the Corps has continued to operate and maintain 25,000 miles of inland and coastal navigation waterways, 5,500,000 surface acres of reservoirs, 237 navigation locks, over 1300 ports and harbors, 75 hydropower projects, 879 flood control projects, and thousands of acres of adjacent lands as part of its water resource mission. Wide-ranging environmental compliance, management, and restoration efforts have become crucial parts of the Corps water resource management mission. The Corps must consider environmental issues related to the operation and maintenance of its existing water resources projects as well as the restoration of degraded ecosystems; e.g., Chesapeake Bay, Everglades, Gulf Coast, Bay Delta, Great Lakes, Puget Sound, Columbia River, Missouri River, Upper Mississippi River and Hudson-Raritan Estuary. In addition, the Corps must proactively address potential negative environmental impacts resulting from proposed activities. This research area addresses the Corps' highest priority environmental issues through the development and application of state-of-science, cost-effective, time-saving technologies including: 1) Maximizing value of ecosystem restoration projects; 2) Restoring Ecological Integrity and Sustainability; 3) Urban Stream Restoration and Management; 4) Coastal Ecosystem Restoration; and 5) Threatened and Endangered / Invasive Species Impacts on Ecosystem Restoration Projects. These user-oriented products will provide scientifically defensible and field validated solutions to the Corps' highest priority environmental problems. They will also reduce unnecessary regulatory burdens, provide environmental benefits, and maintain a high return on taxpayer investment.

Quantifying the environmental benefits and ecological outputs of proposed Corps ecosystem restoration projects is essential for decision makers to be able to select those projects that will yield the highest social, economic and environmental services. The scientific community has criticized current state-of-the-science assessment approaches regarding the underlying model assumptions, oversimplified relations, excessive data requirements, complexities in integrating impacts, and the lack of meaningful metrics to permit biologically-effective decisions. Moreover, current assessments are static and frequently insensitive to important system dynamics, not applicable across multiple scales, and incapable of predicting future conditions. Corps decision makers need robust assessment tools that: incorporate modern ecosystem principles, are easy to apply, offer significant user flexibility to meet individual project requirements, and that provide quantifiable output relevant to the Corps' Performance Measures. These tools will be provided in brief user-focused technical guidance documents, web-based decision

support systems, webinars (interactive web presentations between R&D Scientists and Engineers and Corps Practitioners), classroom and internet based training, and product technical support as required. Additional high priority research and investments in developing Ecosystem Planning Models and in Submerged Aquatic Vegetation research will be conducted as funding becomes available.

PROPOSED ACTIVITIES FOR FY 2014:

- **Maximize Value of the Corps' Aquatic Ecosystem Restoration Program to the Nation** Advance the Corps' capabilities to maximize beneficial socio-ecological outcomes of aquatic ecosystem restoration at regional and national level
    - Analytical tools, models, and framework to use ecosystem services to quantify and evaluate ecosystem service benefits
    - Enhance field capability to perform planning level environmental assessment

$790K

- **Ensure Ecological Integrity and Sustainability of Aquatic Ecosystem Restoration Projects** Develop new science and engineering tools to substantially improve and apply hydro-geomorphic and biotic components of ecosystem restoration projects and to promote ecosystem integrity and sustainability of Corps ecosystem restoration projects.
    - Further upgrades to EFM / Geo-EFM to design and forecast dynamic response trajectories of selected ecosystems at a watershed scale
    - Initiate 2nd phase in evaluation of ecological outcomes and performance (success) of past Corps ecosystem restoration projects

$450K

- **Improve Capabilities to Design and Implement Aquatic Ecosystem Restoration in Urban Settings** Develop ecological engineering tools and capabilities to maximize restoration benefits, including multi-purpose benefits, in urban settings
    - Develop and field test beta tools for successful and sustainable urban stream and other aquatic ecosystem restoration projects
    - Developed a framework, toolkit and web portal for urban stream and other aquatic ecosystems restoration and management
    - Developed protocols for monitoring and adaptive management of urban projects

$860K

- **Enhance Resilience and Reliability of Coastal Ecosystem Restoration** Developed tools, guidelines, and capabilities to incorporate risk and uncertainties associated with climate change and sea level rise on coastal ecosystem restoration and multi-purpose projects that include restoration and coastal flood damage reduction.
    - Provide capability to characterize and evaluate coastal wetland response to alternative sediment and nutrient flux, climate change and SLR
    - Develop measures for estimating and promoting mineralogical sediment processes in coastal wetland environments
    - Provide tools that support efficient planning and engineering practices, promote beneficial uses of dredged materials, and contribute to more sustainable coastal projects

$1.3M

- **Impact and Relationship of Species (Threatened, Endangered, and Invasive) on Ecosystem Restoration** Advance the Corps' capabilities to detect, monitor, and evaluate key species that significantly influence restoration activities.
    - Develop tools and techniques for assessing and improving fish passage connectivity in streams and rivers
    - Provide capability to identify ecological responses to changes in hydrology resulting from restoration projects
    - Develop management capabilities to reduce impact of invasive species on restoration activities

$900K

ACCOMPLISHMENTS FOR FY 2013:

- **Maximize Value of the Corps' Aquatic Ecosystem Restoration Program to the Nation**
  - Evaluated available and emerging models, analytical tools and techniques, and potential data sources that address ecosystem service benefits that accrued from Corps ecosystem restoration at project through program levels.
  - Developed tools and guidelines to support USACE Planning modernization for ecosystem restoration projects
  - Beta tested ecosystem 'significance' criteria for use in budget ranking process for national ecosystem restoration program (Establishing Significance for ER – Pruitt)
  - Enhanced field capability to perform nutrient modeling using HEC-RAS to predict transport of nutrients from watersheds to aquatic resources as a result of Corps ecosystem restoration projects

- **Ensure Ecological Integrity and Sustainability of Aquatic Ecosystem Restoration Projects**
  - Completed phase 1 evaluation of ecological outcomes and performance (success) of past Corps ecosystem restoration projects
  - Provided environmental benefits modeling and forecasting guidebook (with case studies and training modules) for more effective ecosystem restoration
  - Upgraded EFM / GeoEFM model to design and forecast dynamic response trajectories of selected ecosystems at a watershed scale

- **Improve Capabilities to Design and Implement Aquatic Ecosystem Restoration in Urban Settings**
  - Developed conceptual models, metrics, and evaluation tools to design urban stream and other aquatic ecosystem restoration projects and incorporate risk probabilities and trade-offs for multi-purpose projects.
  - Provided engineering techniques and protocols for successful and sustainable restoration projects in urban settings

- **Enhance Resilience and Reliability of Coastal Ecosystem Restoration**
  - Provided capability to assess project performance to include potential impacts from Climate Change and Sea Level Rise (SLR)
  - Evaluated the effects of SLR on salt-water intrusion and ecological shifts
  - Provided capabilities to estimate wetland primary productivity as a means of offsetting SLR
  - Developed measures for promoting sediment accretion and the deposition of materials as a means of offsetting SLR

- **Impact and Relationship of Species (Threatened, Endangered, and Invasive) on Ecosystem Restoration**
  - Improved modeling capabilities for critical species, e.g., oysters in the Atlantic and Gulf Coast

	Allocation in FY 2013	Budgeted Amount in FY 2014
National Flood Risk Management Program (CONTINUING)	$2,850,000 2/	$5,000,000 1/

SCOPE: The Nation faces a growing flood risk crisis with extensive existing development and new development locating in flood prone areas, often behind aging levee systems not intended to protect large populations. Furthermore, through ongoing updates to Federal flood insurance rate maps and the development of the National Levee Database, many communities are learning that they are situated behind inadequately maintained levees no longer providing the levels of flood risk reduction for which they were designed. Confronted with both immediate and future risks to human safety, public infrastructure and private investments, states and communities are seeking and expecting Federal assistance to manage their flood risks. The National Flood Risk Management Program (NFRMP), supported by this line item, makes the most of existing Federal agency programs and funding to assist states and communities in identifying and addressing flood risks by leveraging agency resources, identifying opportunities to jointly implement complementary programs, sharing data and knowledge, and eliminating duplicative or conflicting activities or policies. The NFRMP also supports these same types of coordination activities between Federal agencies and non-Federal flood risk management agencies in order to ensure that federally funded mitigation activities are coordinated with and complement State and local programs and policies that affect flood risks through their influence on land use choices and adoption of flood risk mitigation measures.

JUSTIFICATION: Nationwide, States and communities urgently seek Federal assistance in addressing a growing flood risk crisis. Extensive existing development and newly developing areas are located in flood prone areas, many behind aging levee systems not intended to protect large populations. Furthermore, through ongoing updates to Federal flood insurance rate maps and the development of the National Levee Database, many communities are learning that they are situated behind inadequately maintained levees no longer providing the levels of flood risk reduction for which they were designed. At a time of historic demands on Federal resources, USACE, FEMA and other Federal agencies with a role in managing flood risks, recognize the need to pool their expertise and leverage their resources to more cost-effectively assist states and communities in developing near-term interim risk reduction measures. Such efforts are also yielding long term Federal cost savings as Federal and non-Federal agencies coordinate programs to establish a foundation for future state and local capability to implement long term flood risk management strategies that will ultimately reduce reliance on Federally funded disaster assistance and investments in new, large scale flood control works. Through the National Flood Risk Management Program (NFRMP), Federal and non-Federal partners have already experienced several successes cooperatively developing flood risk mitigation solutions by leveraging agency resources, identifying opportunities to jointly implement complementary programs, sharing data and knowledge, and eliminating duplicative or conflicting activities or policies. These accomplishments are described below.

PROPOSED ACTIVITIES FOR FY 2014: The NFRMP establishes partnerships at the Federal, regional, and state levels through which regular and sustained coordination occur. Fiscal Year 2014 funding and beyond will build on these successful collaborative partnership efforts to reach communities nationwide. Specifically, the range of continuing activities involved in this effort includes

- At the national level, sustaining the work of the Federal Interagency Floodplain Management Task Force (FIFM-TF). The FIFM-TF, co-chaired by USACE and FEMA, is a national level task force of agency representatives from Federal agencies with major water resource programs. The task force is responsible for updating and maintaining a Unified National Program for Floodplain Management; coordinating Federal agency policies for flood risk management; and identifying, developing, and recommending actions and policies by the Federal government necessary to reduce losses due to flooding and protect the safety of flood plain residents. Quarterly meetings of the FIFM-TF provide an opportunity for FEMA and USACE leadership to coordinate flood risk management programs, policies and activities with other federal agencies to improve federal program implementation for the flood risk management community. In between the quarterly meetings the FIFM-TF Working Group composed of senior staff from the member agencies implements the FIFM-TF Work Plan activities. Additionally, the FIFM-TF provides an opportunity for key stakeholder groups representing the non Federal perspective, including the Association of State Floodplain Managers (ASFPM) and the National Association of Storm and Floodwater Management Agencies (NAFSMA), and the Association of State Dam

Safety Officials (ASDSO) to provide both agencies direct feedback on specific policy and implementation issues faced at the state and local level.

- At the regional level, sustaining the activities of the existing Upper Mississippi Regional Flood Risk Management Team and the ongoing flood risk management regional intergovernmental partnerships in the West and Northwest regions to address ongoing flood risk management activities to assess and implement system improvements and environmental and cultural concerns in a sustainable way. USACE-led Regional Flood Risk Management teams provide a venue for interagency and intergovernmental coordination at the regional level to manage flood risks by integrating pre-flood mitigation with a long-term strategy to plan and implement pre- and post-flood emergency actions, while developing promising nonstructural alternatives and other flood risk mitigation actions.
- At the state level, providing direction and oversight to the Silver Jackets program to establish intergovernmental teams in each state in order to leverage and coordinate federal and state programs to address state flood risk management and hazard mitigation priorities. Silver Jackets teams bring together Federal agency representatives at the state level to develop and implement solutions to state flood risk management priorities by assisting state agencies and local communities in leveraging information and resources, improving public risk communication, and creating a mechanism to collaboratively solve flood risk management issues and implement initiatives at the State and local levels.
- Developing and initiating a management framework to improve internal communication between USACE's HQ and Districts and FEMA's HQ and Regions on flood risk management policy, practices and guidance.
- Developing tools and methods for communicating flood risk and encouraging public involvement in flood risk management planning.

Priorities across the multiple activities included in this scope will be set by the USACE Senior Executive National Flood Risk Management Program Steering Committee and FEMA. Input from key stakeholder groups, such as the Association of State Floodplain Managers (ASFPM), the National Association of Flood and Storm Water Management Agencies (NAFSMA), and the Association of State Dam Safety Officials (ASDSO) will be taken into consideration when setting these priorities.

ACCOMPLISHMENTS IN PRIOR YEARS:

- Cooperating with FEMA, other Federal agencies, and states to start up a Silver Jackets program, with intergovernmental teams initiated in 33 states and ongoing development of an additional 17 teams. By establishing state level teams including representatives of multiple Federal and State agencies, the Silver Jackets program has created the opportunity for optimized delivery of Federal flood plain management and mitigation services through leveraging information and resources, resulting in increased and improved public risk communication, and combined efforts to address flood risk management challenges in States and communities. Specific interagency examples include data sharing across agencies to support mapping studies, combined and coordinated use of models, gage data and databases housed in different agencies to create a flood inundation model allowing for more effective flood response and mitigation, synthesis of existing studies and knowledge from different agencies to develop a comprehensive flood risk mitigation plan for a community without requiring any new study effort, and community recovery through short and long term mitigation strategies focused on nonstructural approaches and planning assistance.
- Establishing a permanent, standing Upper Mississippi Regional Flood Risk Management Team (RFRMT) to facilitate interagency coordination at the regional level to integrate long-term flood risk mitigation planning with pre- and post-flood emergency actions. The team has focused, in particular, on identifying nonstructural alternatives to reduce flood risk with the region. Examples of team successes include the elevating or removal of USACE lease cabins incurring repetitive losses and claims on the National Flood Insurance Program and the development of a non-structural alternative to a proposed structural repair by combining the use of different agency programs.
- Established the Mississippi River and Missouri River Interagency Flood Recovery Task Forces to facilitate interagency coordination at the watershed levels on the Mississippi and Missouri Rivers during the recovery and repair of flood damage reduction systems resulting from the FY2011 historic flooding in these watersheds.
- Co-leading the Federal Interagency Floodplain Management Task Force (FIFM-TF) to provide a forum for Federal coordination of agency programs and policies for flood risk management and develop a common approach among Federal agencies when implementing water resource authorities and programs, and to harmonize communication messages and strategies.

- Improved coordination of the USACE nation-wide levee inventory and assessments, improvements to the USACE levee inspection program, USACE emergency response policies, and USACE levee certification policies with FEMA's levee accreditation policies and nationwide RiskMAP program implementation.
- Convened policy discussion forums involving experts in flood risk management from the private sector as well as Federal and non-Federal agencies and leading in the development of new policy and guidance to address institutional, policy and planning barriers to effective flood risk management.
- Initiated work to improve flood risk communication and ensure public involvement in flood risk management planning, working in coordination with Federal and non-Federal flood risk management partners.
- Working with communities to identify options to remediate deficient levees or otherwise address the resulting public safety hazards in a comprehensive flood risk management planning context.
- Participating in the development of a levee risk screening methodology and tool to conduct risk screenings on levees in the Corps levee safety program. Additionally, developed a Life Safety Hazard Index screening tool to assist in identifying and prioritizing planning studies that provide risk reduction to areas with high life loss flood risks.
- As requested by the Administration, acted as lead federal agency in developing a report to present the results of an intensive Federal interagency effort initiated to assess the status of the efforts of each major Federal agency actively addressing the flooding in the area of Devils Lake, North Dakota and options for additional near-term actions within existing authorities.
- Completed the "Improving the Corps of Engineers' Contribution to Flood Risk Management" report that presents preliminary policy and program recommendations that would allow the U.S. Army Corps of Engineers (Corps) to be more effective in sharing responsibility with other federal agencies, non-federal governments, and stakeholders in the management of flood risk.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATIONS TITLE: General Investigations, FY 2014

Total Estimated Federal Cost	Allocation in FY13	Budgeted Amount in FY14
$300,000	$300,000 2/	$300,000 *1/*

Independent Peer Review

SCOPE:

Funds will be used to implement the independent (external) peer review (EPR) requirements as authorized in Section 2034 of the Water Resources Development Act (WRDA) of 2007 (PL 110-114). EPR requirements apply to pre-authorization feasibility studies and various other applicable studies as defined in WRDA 2007, the Information Quality Act, and associated Corps guidance. EPR costs are 100 percent Federal and generally will not exceed $500,000 per review. EPR is required for studies that will recommend projects exceeding $45 million in total costs, as well as studies where there is substantial risk to public safety, which employ novel methods, engender controversy, or meet other conditions as described in the legislation and regulations.

JUSTIFICATION:

Independent (or External) Peer Review is a statutory requirement.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY14 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY 2013	Budgeted Amount in FY 2014
National Shoreline (CONTINUING)	$675,000 2/	$675,000 1/

AUTHORIZATION: The basic study was authorized by Section 215 of WRDA1999. Work on the regional changes to the coast was authorized in Section 816 of WRDA 1986.

SCOPE: The study is an interagency effort to describe the extent and cause of shoreline erosion and accretion on all the coasts of the United States and describe the regional economic and environmental impacts of that erosion and accretion. The study will analyze and recommend the appropriate level of Federal and non-Federal participation in shore protection and beach nourishment, and the advisability of using a systems approach to sediment management for linking the management of all (shore protection, navigation channel dredging, and environmental restoration and preservation) projects in the coastal zone so as to conserve and efficiently manage the effects of erosion. The basic study was authorized by Section 215 of WRDA1999. Work on the regional changes to the coast were authorized in Section 816 of WRDA 1986.

PROPOSED ACTIVITIES FOR FY 2014: FY 2014 funding would continue work on this study. The Fiscal Year 2014 efforts would include:
1. $250,000 for completing Great Lakes Regional Assessment, working on South Atlantic and Pacific North West Regional Assessments.
2. $175,000 for Coastal Systems Portfolio Initiative pilots for Virginia & North Carolina and for expanding the National Coastal Data Bank.
3. $250,000 for the Rising Oceans and Changing Coasts to develop pilot strategies for the most vulnerable regions within the Pacific Northwest & Alaska.

ACCOMPLISHMENTS IN PRIOR YEARS: The study was initiated with FY2002 funding. Accomplishments in prior years include:

1) The detailed assessment of the California Region will be completed and reviewed by the Corps and many stakeholders during FY 2013 and the finalized version will be published in FY 2014.

2) The study continued to support Corps participation in the systematic approach to sediment management reflected in the Corps Regional Sediment Management (RSM) process, regional coastal coalitions from which coastal policies are evolving and emerging, and Corps studies and participation in USGS and NOAA studies describing the state of the Nation's shores, describing systematic movement of sand along the Gulf Coast, and incorporate of the shoreline metadata into the National Coastal Databank. This effort is focused in the mid-Atlantic and California.

3) The quick overview assessment of the eight regions was completed in FY 2012, with a set of tentative conclusions about the future of shore protection and sediment management, as a starting point for engaging the states and other Federal agencies in a new dialogue about coastal protection and systems approaches. FY 2013 will see the engagement with NOAA and FEMA on coastal management challenges.

4) A complete Technical Review of Coastal Projects: Shore Protection, Navigation, and Ecosystem Restoration for all coastal districts will be produced in 2013, and then be available for programmatic updates beginning in 2014.

5) Working closely with USGS and NOAA, the study will continue detailed Regional Assessments of the Hawaii and Great Lakes shorelines.

6) The Rising Oceans and Changing Coasts initiative began in 2012 with a review of how the Pacific Ocean is changing and during 2013, the Corps, NOAA, USGS, and FEMA are working with Hawaii and California to develop appropriate strategies for adapting on a regional scale, given the realistic prospects for coastal change.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation in FY13	Budgeted Amount in FY14
	$4,000,000 2/	$4,000,000*1*/

Planning Support Program (PSP)

SCOPE: The U.S. Army Corps of Engineers Civil Works Program requires a strong planning program to address the full range of complex water resource problems within its mission responsibilities and to better serve the Nation now and in the future. The Planning Support Program (PSP) was established in FY08. This program integrates various initiatives in response to Section 216 recommendations, Corps reform initiatives, and the Corps' Campaign Plan. The program has retained its priority but has received only limited funding (from various sources). The PSP strengthens the capabilities of the Planning Community of Practice (PCoP) to deliver approvable decision documents to Congress in response to identified water resource priorities. The PSP is a vital link to developing the world-class public engineering organization and technical leadership envisioned for the Corps in its Campaign Plan and the Civil Works Strategic Plan.

Congress recognized the need to maintain a strong planning program when it stated in the Water Resources Development Act (WRDA) of 1986 (P.L. 99-662, Sec. 936): "The Secretary shall study and evaluate the measures necessary to increase the capabilities of the United States Army Corps of Engineers to undertake the planning and construction of water resources projects on an expedited basis and to adequately comply with all requirements of law applicable to the water resources program of the Corps of Engineers."

In WRDA 2000, Section 216, Congress asked the National Academies to review Corps' planning and project review practices. In its recommendations, the National Research Council (NRC), parent organization of the National Academies, recognized the many challenges and water resource planning and management controversies facing the Corps. The NRC recommendations are shaping the Corps today and the PSP is critical to moving the Corps and the PCoP forward in response to those recommendations.

WRDA 2007, Section 2033(e) allowed establishment of Centers of Specialized Planning Expertise within the Corps that would provide technical and managerial assistance for project planning, development, and implementation; peer reviews of new major methods, models, or analyses used infeasibility studies; and support independent peer review panels. Section 2033(e) authorization endorsed and accentuated the importance of the six national Planning Centers of Expertise (PCX) established by the Director of Civil Works in August 2003. With the added emphasis of the WRDA, each of the PCXs has a key role in maintaining and strengthening the core competencies of the PCoP.

The ASA(CW) sent a memorandum to the DCG CEO on February 24, 2009 counseling about the considerable variation in the quality of decision documents, feasibility reports and Chief's reports resulting from inconsistent understanding of basic planning and policy among MSC and RIT

members. The ASA(CW) was clear that technical and process consistency must be restored. The ASA(CW)'s views continued support to Corps' planning and policy training and to leadership development "as key commitments that pay valuable dividends", specifically citing the Planning Associates Program as an example. PCXs are also crucial resources for providing technical and process consistency.

JUSTIFICATION: The PSP has three major components, which together provide necessary support to improve the long term capabilities of the PCoP. The three components--planner capability and training; specialized planning centers; and planner resources. This request will fund these components described below.

1. Planner Capability and Training. The PCoP is a hub of learning for its practitioners who are now no longer limited by geography. The expertise of the community is bound in its members who share best planning practices, test innovative solutions, and coach and mentor as a Learning Organization. Development of a capable workforce to execute the mission today and in the future is a top priority of the PCoP leadership.

2. The Planning Associates (PA) Program is an advanced training program for journeyman level water resource planners in the Corps. The program has a long history, but was reinvented in 2003 to include 20 instructional units held at various locations and extending over 1-3 week increments for 11 months. The goals of the program are to broaden the planners' competencies in solving complex water resources problems; to strengthen their leadership skills; and to retain critical planner capability as they progress toward expert planner. Since 2003, 85 planners have completed this rigorous training and 12 more are enrolled in current class. This request will centrally fund a class of up to 12 students and support instructor and other field related expenses necessary to deliver this demanding and rigorous program.

3. In August 2003, the Director of Civil Works designated six national PCXs to enhance Corps planning capability for inland navigation, deep draft navigation, ecosystem restoration, coastal and storm damage reduction, flood damage reduction, and water management and reallocation. The Centers have key roles in maintaining and strengthening the core competencies of the PCoP; providing technical assistance, conducting or managing peer review; transferring the latest technology or methodologies and sharing lessons learned and best practices throughout the planning community. The Centers focus planning expertise to improve product quality and corporate accountability and will also be instrumental in implementation of new approaches or methods resulting from the Corps' Campaign Plan. The PCXs are essential to preparation of the Water Resource Priorities Report directed by Section 2032 of WRDA 2007. Fully functional PCXs are indispensable resources in developing planning process improvements; establishing feasibility study benchmarks; and, modifying regulations for calculation of benefits and costs for flood damage reduction projects, and formulation and evaluation of alternatives as required by Section 2033(b), (c), (d) and (f). In a memorandum to the DCG CEO dated March 12, 2009, the ASA(CW) reemphasized how critical the PCXs are to the Corps' planning capability and to the success of the independent peer review described in Section 2034 of WRDA 2007. This request will centrally fund the PCXs key roles of maintaining and strengthening the core competencies of the PCoP; providing technical assistance, conducting or managing peer review; transferring the latest technology or methodologies and sharing lessons learned and best practices throughout the planning community.

PROPOSED ACTIVITIES FOR FY 2014:

The funds appropriated for the PSP for FY 2014 will be used to support the Planning Associates Program and enable the National PCXs to fulfill their key roles.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY14_ from prior appropriations for use on this effort is $_0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

APPROPRIATION TITLE: Investigations, FY 2014

Total Federal Cost FY2005-FY2011	Allocation for FY 2012	Allocation for FY 2013	Budget Amount for FY 2014
$10,700,000	$957,000	$500,000[1]	$1,000,000 [2]

Tribal Partnership Program (Sec. 203, WRDA 2000; Sec. 2011, WRDA 2007); this is a continuing nationwide program.

AUTHORIZATION: Section 203 of WRDA 2000, reauthorized in Section 2011 of WRDA 2007,authorizes the study of flood damage reduction, environmental restoration, the preservation of cultural and natural resources, water-related planning activities, watershed assessments, and "such other projects as the Secretary, in cooperation with Indian Tribes and the heads of other Federal agencies, determines to be appropriate." Projects follow the standard Civil Works planning process – a reconnaissance report, fully federally funded, and a feasibility report, cost shared 50/50 with in-kind contributions allowed. The WRDA 2007 version added watershed studies that are cost shared 75/25. Separate authorization and appropriations are required from Congress for a project to proceed to PED and construction. The authorization applies to all federally recognized Indian Tribes, including those in the State of Oklahoma and Alaska Native villages. Note: in FY 07 and before, funds were in the Construction account. Beginning in FY08, funding has been through the Investigations account.

JUSTIFICATION: Section 203 was enacted to provide the Corps opportunities to partner with federally recognized Tribes. It is the only authority reserved expressly for federally recognized Tribes, nationwide. As such, it partially fulfills USACE's Trust responsibility to Tribes. The Trust responsibility establishes that the federal government has a legal relationship with Tribal Nations, as first put forth in the US Constitution, Articles I and VI. Priorities for allocation of Section 203 funds are: 1) continuation and completion of ongoing studies and termination of negative studies where appropriate; 2) initiation of studies requested by Tribes; 3) engagement of additional Corps Districts with Tribal governments to build strategic partnerships. Priorities for 203 ensure that a range of studies throughout the Nation are funded. Because the scope of the authority is so broad, various studies may be considered – floodplain mapping, water control management, self-reliance and economic capacity building, technical capacity building, erosion control, cultural resources, comprehensive planning, emergency management, water quality, water supply, community infrastructure, hazardous and toxic waste assessment and clean up, and a host of other projects. With the growing awareness of the program, an increasing number of Tribes have begun to approach the Corps to participate in these studies. Importantly, 203 is a first step to familiarize Tribes with USACE. Its success leads to the use of other authorities and more complex projects. Currently, 35 Tribes are participating in the program.

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
2/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY 2014 is 0. Description of work to be completed: N/A.

PROPOSED ACTIVITIES FOR FY 2014: The following activities will be undertaken with the budgeted amount of $1,000,000: Los Angeles District will continue feasibility studies with the Torres-Martinez Desert Cahuilla Indians (CA), and the Augustine Band of Cahuilla Indians (CA). It will also complete reconnaissance studies for the Tohono O'odham Nation (AZ), Hopi Polacca Wash (AZ), and the Gila River Indian Community (AZ). Albuquerque District will finish a reconnaissance study with the Pueblo of Acoma, and continue feasibility studies with the Pueblos of Santa Clara, San Felipe, Acoma and Santa Ana (all NM). New England District will continue a reconnaissance study with the Wampanoag of Gay Head (Aquinnah) (MA) and begin a feasibility study with the Penobscot (ME). Detroit District will begin a reconnaissance study with the Forest County Potowatomie (WI). If there is enough funding, Seattle District will begin reconnaissance studies with the Quinault Tribe (WA), Kootenai Tribe (ID), Coeur d'Alene Tribe (ID), and Stillamaguamish Tribe (WA). Omaha District will begin a reconnaissance study with the Crow Tribe (MT).

ACCOMPLISHMENTS IN PRIOR YEARS**:** Early in its enactment, the majority of Section 203 funds went to Alaska to study the feasibility of moving coastal villages inland. The program was budgeted at a consistently high level ($4,000,000 to $2,400,000) through FY 2007 to accommodate Alaskan concerns. Villages with the greatest need included (and still include) Newtok, Shishmaref, Kaktovik, Kivalina and Unalakleet. A major coastal erosion study and technical assistance to several Alaskan Villages were also funded in part by Sec. 203 monies. In FY 2007, the program was also targeted by other Districts and special legislation was included for specific Tribes in New Mexico and Idaho. The funding level dropped to $1,000,000in FY 2008, and has never regained its former level of funding. In FY 2013, only $500,000 was budgeted, but the following activities were completed: LRE completed reconnaissance studies for the Stockbridge Munsee Indian Community (WI) and the Nottawaseppi Band of Huron Potowatomie Indians (MI). Kansas City District finished a reconnaissance study with the Kickapoo Tribe (KS), and Walla Walla District began a reconnaissance study with the Nez Perce Tribe (ID). Two FCSAs were completed by the Los Angeles District with the Torres-Martinez Desert Cahuilla Indians (CA) and the Augustine Band of Cahuilla Indians (CA). Albuquerque District signed WACSAs with the Pueblos of San Felipe, Acoma and Santa Ana (all NM). The first WACSA was signed in FY11, between Albuquerque and the Pueblo of Santa Clara (NM).

Other Districts that have utilized Section 203 funding include Sacramento, Omaha, and Buffalo. Reconnaissance reports on various topics were prepared by the Corps for the Penobscot Tribe (ME), Little River Band of Ottawa Indians (MI), Bad River Band of Chippewa (WI), Cheyenne River Sioux Tribe (SD),Lower Brule Sioux Tribe (SD) St. Regis Mohawk Nation (NY), Seneca Nation of Indians/Cattaraugus Creek (NY), Tuscarora Nation (NY), Oneida Tribe of Indians of WI, Onondaga Nation (NY), Kickapoo Tribe (KS), Lower Brule Sioux Tribe (SD), Houlton Band of Maliseets Indians (ME),the Passamaquody Tribe (ME), the Fond du Lac Band of Lake Superior Chippewa (WI), Soboba Band of Luiseno Indians (CA), Havasupai Tribe (AZ), Tohono 'Oodham Nation (AZ), Hopi Tribe (AZ), Augustine Band of Cahuilla Indians (CA), Gila River Indian Community (AZ), and the Torres-Martinez Band of Cahuilla Indians (CA). Not all reconnaissance studies proceeded to feasibility studies.

In the past, the Albuquerque District received special legislation for reconnaissance studies with the Pueblos of Santa Ana, San Juan, San Ildefonso, Santa Clara, and Zuni, Jicarilla Apache Nation (NM), and the Sacramento District received specific legislation for studies of the Washoe Tribe of NV and CA, and the Shoshone-Bannock Tribes of ID. Many Tribes have stated that even if a project does not proceed to feasibility, the program is still valuable because the resulting report pulls together enough information to proceed should additional funding become available, or if the Tribe decides to move forward using other funds.

APPROPRIATION TITLE: Investigations, Fiscal Year 2014

	Allocation FY 2013	Budget Amount FY 2014
Water Resources Priorities Study (New Start)	$0 2/	$1,000,000 1/

AUTHORIZATION: This investigation is authorized by Section 2032 of the Water Resources Development Act of 2007, which calls for an assessment of the Nation's vulnerability to flooding, and for recommendations for improving existing programs and strategies to better manage flood risks.

SCOPE: This investigation will develop a baseline assessment of the nation's flood risks at both a regional and national scale. Through an evaluation of the comparative flood risks across the nation, their key drivers, and their effects, this assessment will reduce costs and serve as a foundation for informed choices at the Federal, State, and local levels about existing programs, authorities, policies, roles, and activities. The investigation will be divided into two elements. The first element will focus on a technical analysis, which will provide background and a basis for the second element, which will result in the public policy recommendations of the report.

The technical section will examine the risks to human life and property from flooding faced in different regions of the United States. The technical analysis will start with a synthesis of existing work related to assessing national flood risk to ensure this effort fully utilizes and builds upon existing knowledge. The technical analysis will provide examples to explain why the risks are greater in some floodplains and some coastal locations than in others, why and how the risks may be changing over time. It will assess existing information on: (1) the number of people who live or work in places where they are potentially at risk; (2) the value of the property that is potentially at risk; and (3) actual flood-related losses (e.g., the frequency and magnitude of large losses, where such losses have been occurring, and the incidence of repetitive losses), in order to identify possible nationwide trends. It will evaluate the existing state of knowledge relating to the drivers of inland and coastal flood risks, including social, economic and climate conditions, as well as the loss of natural flood retention ecosystem services and the effects of changes in these drivers over time. It will also evaluate the uncertainties associated with our current understanding of the way that inland and coastal flood risks could change in the future, both at a regional and at a national scale. This section of the report will also explore the extent to which existing programs and strategies may be encouraging development or other forms of economic activity in flood-prone areas or may otherwise be contributing to flood risks, and their effects on the resiliency and natural functions of floodplains and coastal areas. It will address the full range of effects and tradeoffs associated with current approaches to provide a basis for considering how best to achieve flood risk management goals in concert with other societal objectives.

The second element of the investigation will focus on public policy. Drawing on the knowledge developed through the baseline assessment of national flood risks, it will assess the extent to which existing programs operate successfully (individually and together), and identifies where they may be working at cross-purposes. The report will look at not only programs of the Corps of Engineers, but at a broad array of Federal, state, and local programs and strategies, such as flood insurance, emergency response and recovery, disaster assistance, environmental, land management, and economic development programs and related activities.

This part of the report will include an exploration of the respective and appropriate roles of Federal, state, and local programs, and of their ability to work together. Its purpose is to develop a basis for identifying better ways to approach flood risk management priorities, including ways to reduce

costs by improving the effectiveness, efficiency, and accountability of existing programs and strategies. Finally, the report will include specific recommendations and propose a strategy to implement them.

JUSTIFICATION: This investigation addresses the critical need for a baseline assessment of the nation's flood risks at both a national and regional scale, as well as an analysis of the effects of the existing portfolio of programs, authorities, policies, roles, and activities. A large body of evidence suggests the nation is facing growing flood risks. There is currently a lack of adequate information at a national and regional scale about the magnitude and source of those risks, as well as the effectiveness, efficiency, accountability, and impacts of existing programs and strategies. This investigation addresses the critical need for an analytically sound assessment of existing programs, which will provide a basis for significant recommendations on ways to better manage flood risks at the national, regional, state, and local levels. It will provide an understanding of the key drivers and magnitude of flood risks, as well as the net effect that the existing portfolio of Federal and non-Federal programs and policies has on those flood risks. Specifically, this study will provide a baseline assessment of the nation's vulnerability to flooding from a national and regional perspective and identify key drivers of flood risks, including those drivers expected to change over time. Additionally, this study will assess the combined effects of the existing portfolio of Federal and non-Federal programs and policies on choices that impact flood risk, including the choice to develop in flood-prone areas. This knowledge will provide a foundation for recommending improvements to existing programs, authorities, policies, and roles to better manage flood risks in coordination with states and localities.

PROPOSED ACTIVITIES FOR FY 2014:

- Assembling and synthesizing the existing body of knowledge relating to the assessment of national flood risks and related policies and programs. This would entail an inventory of all federal agency work relating to mapping and characterizing flood risks. The inventory and resulting report would provide a basis for determining whether and how existing efforts might be built upon to accomplish the objectives of this study. Additionally, the report would provide a basis for comparing and contrasting efforts, looking for opportunities to combine knowledge, and identifying commonly shared data limitations that could inform data development priorities.

- Drawing on this knowledge, developing scopes of work and methodological approaches for both elements of the effort.

- Assembling an interagency working group to acquire input on direction of the study on an ongoing basis to ensure full utilization of the knowledge and technical expertise each can offer.

- Initiating work on the technical element, to include establishing a conceptual definition of risk, including hazard, exposure, vulnerability and resilience, identifying determinants of each of these elements of risk and the availability of data required to evaluate such determinants, collecting and organizing spatially referenced data describing the determinants of risk in order to provide the baseline assessment of national and regional scale flood risks.

- Initiating work to describe and evaluate the full range of Federal and non Federal programs and strategies that affect flood risk to provide an understanding of how they are currently functioning and affect the full range of flood risks and other societal objectives.

ACCOMPLISHMENTS IN FY 2013: No funds appropriated in FY13.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Remaining Items – Construction

Environmental Projects

Aquatic Ecosystem Restoration (CAP Section 206)

SUMMARIZED FINANCIAL DATA:

Appropriation for FY 2013 1/	$4,034,000
Estimated FY 2013 Unobligated Carry-over	0
Allocation Requested for FY 2014	$6.100,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

AUTHORIZATION: Section 206 of the Water Resources Development Act of 1996 (PL 104-303), as amended, authorizes up to $50,000,000 annually to carry out aquatic ecosystem restoration projects that will improve the quality of the environment, are in the public interest and are cost-effective.

JUSTIFICATION: Ecosystem restoration projects that will improve the quality of the environment are in great demand by local communities and the general public at large. Non-Federal interests shall provide 35 percent of the cost of construction including provision of all lands, easements, rights-of-way, and necessary relocations. Non-Federal interests pay 100 percent of the cost of operation, maintenance, replacement and rehabilitation. Not more than $5,000,000 in Federal funds may be allocated to a project at a single locality.

PROPOSED ACTIVITIES FOR FY 2014: The Budget proposes that funds be allocated based on CAP policies and procedures.

Environmental Projects

Beneficial Uses of Dredged Material (CAP Section 204)

SUMMARIZED FINANCIAL DATA:

Appropriation for FY 2013 1/	$4,995,000
Estimated FY 2013 Unobligated Carry-over	0
Allocation Requested for FY 2014	$5,000,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

AUTHORIZATION: Section 204 of the Water Resources Development Act (WRDA) of 1992 Public Law (PL) 102-580, Section 207 of PL 102-580, and Section 145 of WRDA of 1976 (PL 94-587), as amended by Section 933 of PL 99-662, Section 35 of PL 100-676, Section 207 of PL 102-580, Section 217 of PL 106-53, and Section 111 of PL 106-541.

JUSTIFICATION: Section 204 authorizes projects for the protection, restoration, and creation of aquatic and ecologically related habitats, including wetlands, in connection with dredging for construction, operation, or maintenance of an authorized navigation project. Section 204 total program limit is $15,000,000. Non-Federal interests share in a minimum of 25 percent of the project cost. Section 207 modified Section 204 by authorizing disposal in any manner for which the environmental benefits outweigh the added costs.

PROPOSED ACTIVITIES FOR FY 2014: The Budget proposes that funds be allocated based on CAP policies and procedures.

Flood Risk Management Projects

Flood Control (CAP Section 205)

SUMMARIZED FINANCIAL DATA:

Appropriation for FY 2013 1/	$4,978,000
Estimated FY 2013 Unobligated Carry-over	0
Allocation Requested for FY 2014	$7,900,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

AUTHORIZATION: Section 205 of the Flood Control Act of 1948 (PL 80-858), as amended, authorizes up to $55,000,000 annually for construction of flood control projects where such construction is not already specifically authorized by Congress.

JUSTIFICATION: Each year, small communities are faced with localized flooding and these communities can be helped with this program. Projects are designed to provide the same complete project and same degree of protection provided under regular authorization procedures. Each project selected must be economically justified and complete within itself. Federal cost participation is limited to $7,000,000 per project at a single locality.

PROPOSED ACTIVITIES FOR FY 2014: The Budget proposes that funds be allocated based on CAP policies and procedures.

Project Modifications for Improvement of the Environment (CAP Section 1135)

SUMMARIZED FINANCIAL DATA:

Appropriation for FY 2013 1/	$5,249,000
Estimated FY 2013 Unobligated Carry-over	0
Allocation Requested for FY 2014	$9,500,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

AUTHORIZATION: Section 1135 of the Water Resources Development Act of 1986 (PL 99-662), as amended authorizes review of Corps water resources projects to determine the need for structural or operational modifications for the purpose of improving the quality of the environment in the public interest; to determine if the operation of such projects has contributed to the degradation of the quality of the environment; and to carry out a program of such modifications that are feasible and consistent with authorized project purposes.

JUSTIFICATION: The post construction operation of Corps projects may encounter unforeseen environmental impacts as a result of those projects. This program allows the Corps to study and implement a structural or operational modification to a project that can be undertaken to improve overall environmental quality. Up to $40,000,000 may be appropriated annually. The non-Federal share of the cost of any modifications will be 25 percent. Not more than $5,000,000 in Federal funds may be expended on any single modification or measure pursuant to Section 1135.

PROPOSED ACTIVITIES FOR FY 2014: The Budget proposes that funds be allocated based on CAP policies and procedures.

Navigation Projects

Navigation Mitigation Projects (CAP Section 111)

SUMMARIZED FINANCIAL DATA:

Appropriation for FY 2013 1/	$4,806,000
Estimated FY 2013 Unobligated Carry-over	0
Allocation Requested for FY 2014	$500,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

AUTHORIZATION: Section 111 of the River and Harbor Act of 1968 (PL 90-483), as amended, authorizes the construction of projects for the prevention or mitigation of shore damages attributable to Federal navigation works.

JUSTIFICATION: The cost of installation is cost shared in the same manner as the costs for the project causing the shore damage. The cost of operation and maintenance is borne by the non-Federal sponsor. Projects first cost shall not exceed $5,000,000 without specific authorization.

PROPOSED ACTIVITIES FOR FY 2014: The Budget proposes that funds be allocated based on CAP policies and procedures.

APPROPRIATION TITLE: Construction – Flood Risk Management – Remaining Item

PROJECT: Dam Safety and Seepage/Stability Correction Program (Continuing)

LOCATION: The Dam Safety and Seepage/Stability Correction Program provides for studies and modification of completed Corps of Engineers dams. The studies are located in various states (except Hawaii and Maine).

DESCRIPTION: There are 708 dams under the Corps jurisdiction. While no Corps dams are in imminent danger of failure, some have been identified as having a higher risk of a dam safety incident than originally anticipated based on new data, including the likelihood of extremely large floods and seismic events. The Corps has implemented a Portfolio Risk Analysis program and has completed screening 100% of the Corps dams. The evaluation studies funded under the Dam Safety and Seepage/Stability Correction Program are for dams identified with very high risks of a dam-safety incident (Dam Safety Action Classification (DSAC) I or II). Dam modification work is proceeding under existing authorities on projects where cost effective risk reduction measures have been identified in accordance with national priorities.

AUTHORIZATION: Water Resources Development Act of 1986; Dam Safety Act of 2006; Executive Order of the President; and the Federal Guideline for Dam Safety

SUMMARIZED FINANCIAL DATA:

	Program Total	1/
Allocation for FY 2011	$ 49,100,000	
Allocation for FY 2012	$ 37,155,000	
Allocated Carry-In Funds for FY 2013	$ 505,000	
Conference Amount for FY 2013	$ 47,750,000	2/
Total Allocation during FY 2013	$ 48,255,000	
Estimated Carry-In Funds	$ 0	3/
President's Budget for FY 2014	$ 45,000,000	

1/ The project is an annual program (data is not accumulative)
2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
3/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A

PHYSICAL DATA: The Corps of Engineers has a portfolio of 708 dams located in 48 of the states and Puerto Rico. Each dam has a Dam Safety Action Classification based on a risk analysis. This project provides an Initial Evaluation Study (IES) and Dam Safety Modification Studies (DSMS) for the highest risk dams.

JUSTIFICATION: The Federal Guidelines for Dam Safety (FEMA 93) issued by Executive Order of President Carter require each Federal agency with responsibility of the operations and maintenance of dams to have a dam safety program to include dam safety modification. The Dam Safety and Seepage/Stability Correction Program provides for studies and modification of completed Corps of Engineers dams. There are 708 dams under the Corps jurisdiction. While no Corps dams are in imminent danger of failure, some have been identified as having a higher risk of a dam safety incident than originally anticipated based on new data, including the likelihood of extremely large floods and seismic events. The Corps has implemented a Portfolio Risk Analysis program and has completed screening 100% of the Corps dams. The evaluation studies funded under the Dam Safety and Seepage/Stability Correction Program are for dams identified with very high risks of a dam-safety incident (DSAC I or II). Dam Safety Assurance modifications are made because of new data on the project's ability to provide for passage of the maximum probable flood (PMF), based on changes in the climate or hydrology of the area or because of new data on seismic risks. Other dam safety modifications are designed to insure that the dam retains the reservoir during and after a major earthquake. Some seepage problems at USACE dams are related to increases in pressure arising from reservoir levels above the previous pool of record at a dam. Other seepage problems arise due to water seeping through the contact between the dam and bed rock. Static instability generally involves movement that starts at a slow rate and could result in massive displacement of large volumes of material if not corrected. Seepage/stability correction projects are classified as major rehabilitations for dam safety. Dam modification work is proceeding under existing authorities on projects where cost effective risk reduction measures have been identified in accordance with national priorities.

FISCAL YEAR 2013: The TOTAL unobligated dollars are being applied as follows (includes $ 505,000 of unallocated FY 2012 funds):

Dam Safety Evaluation Studies	$ 37,505,000
Post Evaluation Work	$ 10,750,000
Total	$ 48,255,000

FISCAL YEAR 2014: The budget amount of $45,000,000 plus carry-in funds of $0 will be applied as follows:

Dam Safety Evaluation Studies	$30,000,000
Post Evaluation Work	$15,000,000
Total	$ 45,000,000

PROPOSED ACTIVITIES FOR FISCAL YEAR 2014: The $45,000,000 requested for Fiscal Year 2014 will be used (1) for high priority studies ($30,000,000) and (2) to continue post-evaluation work ($15,000,000) on high risk dam safety assurance, seepage control, and static instability correction projects, once their evaluation reports are approved.

Evaluation Studies: $30,000,000 is requested. The Corps Screening Portfolio Risk analysis has identified 55 Dam Safety Action Class I and II projects for studies and evaluations which will be conducted during Fiscal Year 2014. These 55 dams are the highest priority projects where detailed studies have not been completed in prior years. A list of Evaluation Studies is provided below.

Post Evaluation Work: $15,000,000 is requested. Based on current evaluation study schedules and planned activities, there are 10 DSAC I & II projects anticipated to have approved DSMR's in late FY13 and FY14, and will require WEDGE Funds for Post Evaluation (PED) Activities. A list of Post Evaluation Work is provided below.

Evaluation Studies

Ball Mountain Dam, VT
Beach City Dam, OH
Beach City Dam, Brewster Levee, OH
Big Creek Diversion Dam, IA
Blakely Mountain Dam, AR
Bolivar Dam – Magnolia Levee, OH
Canyon Lake, TX
Carbon Canyon Dam, CA
Cecil M Harden Lake Dam, IN
Cherry Creek Dam, CO
Delaware Dam, OH
Denison Dam, Cumberland Dikes, OK
Dexter Dam, OR
Edward MacDowell Dam, NH
F.J. Sayers Dam / Howard Levee, PA
John Martin Dam– Fort Lyon, CO
FWR Structure Site No. 47, MS
Gathright Dam, VA
Green Peter -Foster Dam, OR
Hammond Dam, PA
Herbert Hoover Dike, FL
Hidden Dam, CA
Hills Creek Dam, OR
Hop Brook Dam, CT
J. Percy Priest Dam, TN
J. Edward Roush Dam, IN
Keystone Dam, OK
Keystone Dam, Cleveland Levee, OK
Lake Shelbyville Dam, IL
Lopez Dam, CA
Mansfield Hollow Dam, CT
McNary (Kennewick) Levees, OR
McNary (Pascoe) Levees, OR
McNary (Richland) Levees, OR
Mill Creek Diversion Dam, WA
Orwell Reservoir Dam, MN
Paint Creek Dam, OH
Paint Creek Dam, Little Pond Dam, OH
Patoka Lake Dam, IN
Prado Dam, Housing Dike, CA
Prado Dam, Treatment Dike, CA
Robert S. Kerr Lock & Dam, OK
San Antonio Dam, CA
Santa Fe Dam, LACDA, CA
Santa Rosa Dam, NM
Saylorsville Dam, Big Creek Str, IA
Stillhouse-Hollow Dam, TX
Tappan Dam, OH
Terminus Dam, CA
Town Bluff Dam, TX
Trinidad Dam, CO
Union Village Dam, VT
Upper Appleton Dam, WI
Waterbury Dam, NY
Whittier Narrows Dam, LACDA, CA

Post Evaluation Work

Addicks Dam (Buffalo Bayou), TX
Barker Dam (Buffalo Bayou), TX
Dover Dam, Zoar Levee, OH
Isabella Dam, CA
Lewisville Lake Dam, TX
Moose Creek Dam, AK
Martis Creek Dam, CA
Mohawk Dam, OH
Pine Creek Dam, OK
Rough River Dam, KY

NON-FEDERAL COST: The cost of the Evaluation Study Phase is 100% Federal Costs. The non-Federal cost of the Post Evaluation Work varies from dam to dam and is calculated in the various DSMR's in accordance with either the Water Resources Development Act of 1986 as amended or the Reclamation Safety of Dams Act (P.L. 98-404) as amended.

STATUS OF LOCAL COOPERATION: To Be Determined during Post Evaluation Work from the various DSMR's.

COMPARISON OF FEDERAL COST ESTIMATES: N/A

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: NEPA documentation will be or has been included in the various DSMR's.

OTHER INFORMATION: A Dam Safety Investment Plan (DSIP) has been developed for the correction of current deficiencies. The current estimated cost to bring all dams to tolerable risks levels is $26,000,000,000.

Employees Compensation (Payments to the Department of Labor)

Budget Amount for FY 2013 2/	$23,726,000
Budget Amount for FY 2014	$19,000,000

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

GENERAL: Public Law 94-273, approved April 21, 1976, 5 USC 8147b, provides that each agency shall include in its annual budget estimates a request for an appropriation equal to costs previously paid from the Employees Compensation Fund on account of injury or death of employees or persons under the agency's jurisdiction.

BUDGET REQUEST: The $19,000,000 for Fiscal Year 2014 represents the total estimated cost of benefits and other payments made from the Employees Compensation Fund during the period July 1, 2011, through June 30, 2012, due to injury or death of persons under the jurisdiction of the Corps of Engineers civil functions and also includes $1,200,000 for the investigation of fraudulent claims for workers' compensation benefits.

APPROPRIATION TITLE: Construction – Navigation – Remaining Item

PROJECT: Inland Waterways Users Board (CONTINUING)

LOCATION: National

AUTHORIZATION: The Inland Waterways Users Board was established by Section 302 of the Water Resources Development Act of 1986, (PL 99-662) and pursuant to the Board's charter, approved by the Secretary of the Army on March 3, 1987. The Board is an advisory committee subject to the requirements of the Federal Advisory Committee Act (PL 92-463, as amended).

SUMMARIZED FINANCIAL DATA:

	Program Total	
Estimated Annual Cost	$ 895,000	1/
Allocation in FY 2013	$ 860,000	3/
Estimated Carry-In Funds	$ 0	2/
President's Budget for FY 2014	$ 860,000	

PHYSICAL DATA: N/A

JUSTIFICATION: The $860,000 requested this Fiscal Year will allow the Corps to fulfill its Congressionally authorized support role for the needs of, and activities associated with, the Inland Waterways Users Board (the Board).
(1) Funds in the amount of $60,000 are requested to meet the estimated expenses of the eleven-member Board for its travel, meeting, and other needs to meet the requirements of the charter. Board member travel expenses have increased from prior years due to inflation, primarily for airfares.
(2) Funds in the amount of $800,000 are requested for Corps of Engineers expenses related to its responsibilities as an advisory committee sponsor and to provide objective analyses related to the financial structure of the Inland Waterways Trust Fund, and in support of efforts to increase revenue to support a substantial increase in spending for inland waterway modernization and major rehabilitation, and for the Inland Marine Transportation System (IMTS). The Deputy Commanding General for Civil and Emergency Operations has been designated Executive Director to the Board, and he has designated staff members to provide continuing Board support. Corps expenses will include personnel costs for administrative Board meeting support, including staff travel, clerical, printing, and related materials. Additionally, increased resources are needed to support the ongoing reevaluation of the financial basis of the Inland Waterways Trust Fund, which falls under the advisory purview of the Board. The trust fund balance is depleted and is now only sustained by annual revenue flows. In September 2011, the President proposed a user fee that would provide revenue to augment the current Inland Waterways fuel tax. This proposal and alternative proposals will require intensive coordination with the Board and stakeholder groups.

ACCOMPLISHMENTS FOR FISCAL YEAR 2013: The FY 2013 appropriations included $860,000 for these activities. FY 2013 activities include Corps personnel costs to coordinate, attend, and provide analytical support for three scheduled meetings of the Board pursuant to their charter.

Support also included Board meeting logistics, including staff travel, clerical, printing, and related materials, as well as analyses conducted at the request of the Board.

FISCAL YEAR 2014: The budget amount of $860,000 plus carry-in funds of $0 will be applied as follows:

Board Member Meeting Support	$60,000
Board Activities	$800,000
Total	$ 860,000

PROPOSED ACTIVITIES FOR FISCAL YEAR 2014: Proposed activities include Corps personnel costs to coordinate, attend, and provide analytical support for three meetings of the Board pursuant to their charter. Includes funding necessary to conduct analyses of the IMTS requested by the Board, reevaluation of the financial basis of the trust fund and related proposals, and coordination with the Board and stakeholder groups.

NON-FEDERAL COST: N/A

COMPARISON OF FEDERAL COST ESTIMATES: N/A

1/ The project is an annual program (data is not accumulative)
2/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this project effort is $0. This amount will be used to perform work on the project as follows: N/A
3/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT: Estuary Restoration Program (Title I of P.L. 106-457) (Continuing)

AUTHORIZATION AND PROGRAM DESCRIPTION: The Estuary Restoration Act of 2000, Title I of P.L. 106-457, as amended, authorizes the Secretary to carry out estuary habitat restoration projects recommended for implementation by the Estuary Habitat Restoration Council—which consists of representatives of the National Oceanic and Atmospheric Administration (NOAA), Environmental Protection Agency, Department of the Interior (U.S. Fish and Wildlife Service), Department of Agriculture, and the Department of Army. . Each project must address restoration needs identified in an estuary habitat restoration plan, be consistent with the estuary habitat restoration strategy developed under the Act, include a monitoring plan that is consistent with the standards for monitoring developed under the Act and include satisfactory assurance from the non-Federal interests proposing the project that the non-Federal interest will have the capability to carry out items of local cooperation, including maintenance. Except when innovative technology is involved the Federal share may not exceed 65 percent of the cost of the project. Non-Federal interests shall provide lands, easements, rights-of-way and relocations and are responsible for all costs associated with operating, maintaining, replacing, repairing, and rehabilitating the projects.

SUMMARIZED FINANCIAL DATA:

Allocation for FY2012	$1,960,000
Conference Allowance for FY2013	$1,000,000 1/
Estimated FY 2014 Unobligated Carry-In Funds	$ 0 2/
President's Budget for FY2014	$1,000,000

1/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.
2/ Estimated Unobligated Carry-in Funding: NA

ACTIVITIES: As of September 2012, six projects have completed construction, two others have nearly completed construction and three more are about to start construction. Nine additional projects are in the preconstruction phase.. The Corps proposes to use a cooperative agreement to implement the majority of these projects, which should expedite implementation. Examples include removal of invasive species and re-vegetation with native species in Florida estuaries; restoring oysters off the Texas, Mississippi, and North Carolina coasts; restoring more natural flow to a tidal creek in Massachusetts; and restoring previously diked tidal areas in several locations in California.
As funds are available new solicitations for projects are announced. Healthy estuaries play an important role in the life cycles of many aquatic species with high commercial value from blue crabs to salmon. Healthy estuarine wetlands contribute to improved water quality and may aid in the reduction of flood risks. There is a growing awareness of the need to develop restoration projects responsive to sea level change and that will be considered in the selection of new projects to fund. Restoration of estuary restoration projects will contribute to efforts towards achieving more sustainable estuarine ecosystems.

FISCAL YEAR 2013: A solicitation for new project proposals has been announced and the carry in funds not committed to ongoing projects and any fiscal year 2013 appropriation will be committed to fund new projects resulting from this solicitation.

FISCAL YEAR 2014: The Budget amount plus any uncommitted carry-in funds will be applied as follows:
Continue estuary habitat restoration by funding new projects $1,000,000

OTHER INFORMATION: NA

Remaining Items – Operations and Maintenance

O&M Justification Sheet

PROJECT NAME: IPET/HPDC Lessons Learned Implementation to Improve Operation and Maintenance

AUTHORIZATION: Various authorities including River and Harbors Act & Flood Control Act of 1948, Section 102 of the Rivers and Harbors Act of 1962, Section 216 of the River and Harbor and Flood Control Act of 1970, Section 731 of the Water Resources Development Act of 1986, Section 729 of the Water Resources Development Act of 1986, specific project and purpose authorizations, and Executive Order 13514.

LOCATION AND DESCRIPTION: O&M Remaining Item, Nationwide. The IPET-HPDC Lessons Learned Implementation Team provides a systems- and risk-based approach that captures the impacts of incremental changes from natural, dynamic processes and human activities throughout the lifecycle, combined with more comprehensive review of projects, is required for USACE to more fully address risks due to extreme events, especially as we increase emphasis on aligning federal, state, and local projects, programs and authorities for risk management; on making decisions collaboratively; and on improving communication about residual risk. The work being accomplished by multiple national teams producing specific product outcomes related to four major components: comprehensive systems approach, risk management and communication, professional and technical competence, and improved water management. USACE is incorporating the new methods in programs and activities that enhance the operation, safety and sustainability of our built infrastructure based on those lessons learned.

CONFERENCE AMOUNT FOR FY 13: $ 7,000,000 2/
BUDGETED AMOUNT FOR FY 14: $8,125,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 14:

N: N/A

FRM: $8,125,000 will be used to continue building on work accomplished to respond to critical needs identified in the wake of recent extreme events. Specifically, FY 2014 funding will be used to continue work in the following program components:

Comprehensive Systems Approach ($3,450,000)
Emphasizes an integrated, comprehensive and systems based approach incorporating anticipatory management to remain adaptable and sustainable over the project life cycle, placing the highest priority on protection of public health and safety. Improve the effectiveness of post-authorization evaluations and assessments of physical, social, and institutional change over time. Update existing and develop new tools to provide analyses and decision support on a system basis; provide methods and guidance to incorporate adaptive management into decision making to account for dynamic processes such as sea level rise and climate change; implement a nationwide datum and subsidence standard consolidate and expand policies, methods, and technologies to achieve long-term sustainability of USACE infrastructure.

Risk Informed Decision Making and Communication ($1,700,000)
Emphasizes integrated risk management through implementation of risk and reliability concepts to operations and major maintenance. Update methods, models guidance to assess engineering and operational reliability of local protection systems; fully develop risk analyses concepts, including social and environmental impacts; update levee certification guidance; apply innovative modeling methods used in IPET to identify failure causes due to soil conditions for other regions with levees of concern; develop capability to model the risk and reliability effects of surge and

overtopping including any dynamic effects. Emphasizes clear and candid communication of risk both internally and externally, supporting risk-informed decision making over the project life cycle. Improve ways to characterize and communicate public health and safety for our built infrastructure. Conduct detailed review and revision of existing engineering and operations guidance to include risk communications. Apply new framework for existing projects that incorporates public involvement in risk reduction strategies.

Professional and Technical Competence ($525,000)
Emphasizes professionalism and technical competence to provide responsible and competent public service professionalism with life safety as a fundamental driver. Operating and maintaining USACE's aging infrastructure requires unique skill sets that differ from those needed for the planning and engineering of new projects. The O&M portion of this theme will include investments that will better equip staff competencies in the key areas of life-safety based programs as well as normal project operations.

Improved Water Management ($2,450,000)
Concentrated program to enhance the operational decision making for floods, droughts, operations planning and real-time operations. Advance the implementation of the Corps Water Management System (CWMS) nationwide, including developing the hydrologic and hydraulic models required for a watershed approach to effectively meet authorized purposes. Data collection, data dissemination, and modeling and analysis capabilities will be addressed on a national level. Funds from this account will be targeted for the most critical watersheds that have not yet moved into the CWMS environment. Establish a National Enterprise Water Management System with continuity of operations capabilities that fully supports the water management mission and complies with US Army Corps of Engineers and Department of Defense Corporate Information Assurance and Security requirements.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Incorporation of lessons learned and new information is crucial for an engineering organization that provides services whose performance can be tested by extreme events, such as floods, droughts, and coastal storms. The program objective is to improve the public safety and performance of USACE's built infrastructure based on gaps, weaknesses and lessons learned from events such as the 2012-13 drought, Superstorm Sandy, the greater Mississippi River Basin flood of 2011, the Nashville flood of 2010, and other extreme events dating back to Hurricane Katrina and its lessons learned efforts (the Interagency Performance Evaluation Taskforce – IPET, and the Hurricane Protection Decision Chronology- HPDC). An integrated, comprehensive, sustainable, and systems-based approach that places the highest priority on protection of public health and safety is the most effective way for USACE to provide safe, reliable projects working together as a system with increased economic and environmental benefits. Incorporating updated and improved methods to estimate, assess, manage, and communicate risk are critical to planning, design, operation, and management of water resources infrastructure to meet the Nation's evolving needs. Recent extreme events have highlighted the need to implement state-of-the-art systems-based water management tools consistently across the nation, to optimize operation of our reservoirs to maximize benefits, including flood risk management and public safety, water supply, and water quality. A comprehensive system analysis that considers a total risk framework for managing and communicating risk, and that incorporates standardized water management will benefit the entire USACE portfolio of projects, including aging critical infrastructure.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Aquatic Nuisance Species Research

AUTHORIZATION: The Non-indigenous Aquatic Nuisance Prevention and Control Act of 1990 (PL 101-646). The National Invasive Species Act of 1996 (PL 104-332) reauthorized and amended the Non-indigenous Aquatic Nuisance Prevention and Control Act.

CONFERENCE AMT. FOR FY 2013: $690,000 2/

BUDGETED AMT. FOR FY 2014: $690,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:
According to a journal article published in 2005 by David Pimentel, et al, invasive species cost the public over $138 billion annually. The National Invasive Species Council estimates that over 100 nuisance species are introduced into U.S. annually –which may adversely impact operations and maintenance on Corps' facilities and threaten valued natural resources. Zebra mussel impacts alone cost the public over $1 billion annually states the National Invasive Species Council. Methods of prevention and more effective, inexpensive methods of control of invasive species must be developed to prevent impacts to public facilities and protect valuable natural resources.
Research efforts have been expanded under the Aquatic Nuisance Species Research Program (ANSRP) to address invasive aquatic species that impact the nations' waterways infrastructure and associated resources. Methods for prevention, control, and restoration of natural resources will be developed. Control strategies are being developed for: (a) navigation structures, (b) hydropower and other utilities, (c) vessels and dredges, and (d) water treatment, irrigation, and other water control structures.

The ANSRP provides Corps managers and operational personnel with innovative technologies regarding risk assessment, prevention strategies, species life history/ecological data, and cost-effective, environmentally-sound options for managing aquatic nuisance species (ANS). Program research focuses on: 1) The evaluation of potential control/barrier methods to prevent the transfer of Asian carps and other ANS between the Mississippi River and Great Lakes Basins; 2) New techniques for control of zebra and quagga mussels moving westward past the 100th meridian; 3) Improved control methods for harmful algal blooms through new chemicals and life cycle sensitivity analysis; 4) Corps personnel training in recognition and control methods of ANS on Corps lands/waters; 5) Web-based regional lists of aquatic invasive species on Corps projects; and 6) Methods that reduce invasive species impacts to threatened and endangered species and provide restoration of natural habitats.

PROPOSED ACTIVITIES FOR FY 2014**:**

- Complete field validation studies to evaluate the effectiveness and use patterns of an invasive mussel biopesticide.
- Develop operational guidance for a new, bacterial-based biopesticide product (application strategies and dosing requirements) for controlling invasive biofouling mussels that minimize impacts to non-target species.
- Evaluate the feasibility of alternative management and harvesting options for minimizing impacts of Asian carp populations.
- Developed a risk-based decision framework to assist with prevention and management of invasive *Dreissenid* mussel species.
- Assess the ecological impacts of invasive gastropod species (e.g., channeled apple snail and Chinese mystery snails, New Zealand mud snails) on native invertebrate and plant populations.
- Evaluate the potential use of environmentally benign surfaces to resist bioadhesion of invasive mussels on Corps infrastructures.
- Provide aquatic invasive species technology transfer in the form of technical assistance, guidance documents, and webinars to COE Districts and Divisions.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	$677,000	
Allocation for FY12	$669,000	
Conference Allowance for FY13	$690,000	
Allocations through FY13	$690,000	2/
Estimated FY14 Carry-In Funds	$0	
President's Budget for FY14	$690,000	1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

Asset Management Program supporting USACE Infrastructure Strategy

CONFERENCE AMOUNT FOR FY 2013: $4,750,000 2/
BUDGETED AMOUNT FOR FY 2014: $4,750,000 1/

AUTHORIZATION: EO 13327, "Federal Real Property Asset Management," Feb 2004; DOD (ASD (C3I)) memorandum, 10 Jul 95, Selecting the FEM System as a DoD migration system for Computerized Maintenance Management System [CMMS]. US Army Corps of Engineers Campaign Plan, Action 2d.1: USACE Infrastructure Strategy.

JUSTIFICATION:

The Corps of Engineers is responsible for managing a portfolio of water resources infrastructure consisting of more than 4000 assets and projects valued at over 239 billion dollars. This diverse infrastructure provides a broad range of critical services supporting the Nation's economy, security, and quality of life. As the service life of this aging infrastructure continues to extend beyond its design life, it is imperative to develop an integrated national strategic plan for assessing those assets through a lifecycle portfolio analysis to improve reliability, minimize risk, and meet the current and projected needs of the Nation. These assets and projects must also be analyzed through a comprehensive watershed, or systems, lens. This entails adaptively developing watershed infrastructure requirements that meet today's needs as well as those of the future; strategically planning to link current and future Corps projects with other federal and non-federal project objectives and investments at the watershed or system level. Another vital aspect of this strategy is to evaluate and employ alternative financing options through public-private partnerships (P3). This effort will involve working within our existing authorities to expand our available financing options, learning from the P3 experiences of other agencies as to the authorities and processes that provided them the most benefit, and working with our stakeholders to fully understand and leverage their investment interests through partnerships that can enable desired infrastructure/system outcomes. Finally, the Corps will make a focused effort to communicate effectively and strategically with our partners, stakeholders, and the public to insure this is a joint effort.

The USACE Infrastructure Strategy (UIS) is one of the four pillars of the CW Transformation (CWT) initiative and is fully aligned with the CW Strategic Plan and the USACE Campaign Plan. The UIS sets the foundation for future water resources infrastructure through effective lifecycle portfolio management that applies the principles of integrated water resources management in a watershed/system context. The end state goal of the UIS: USACE CW infrastructure is relevant, resilient, and reliable utilizing IWRM strategies to address water resources need sustaining communities, energy, water, and land resources.

The Asset Management Program is an integral part of UIS and further supports the Corps in managing the Real Property initiative (EO 13327) to ensure that property inventories are maintained at the right size, cost, and condition to deliver Corps missions.

In support of the lifecycle portfolio analysis, the Corps has deployed the Facilities and Equipment Maintenance (FEM) system (a DoD standard) as its computerized maintenance management tool. FEM provides on-line interactive information for managing the day-to- day maintenance activities and costs of assets, facilities, equipment, and parts and is an integral enabler to asset management. The Corps has also begun deployment of a standard condition assessment methodology to better inform the prioritization of maintenance management processes, and is piloting portfolio analysis tools and processes to prioritize investments in terms of benefits and risk to maximize the effectiveness of resources.

PROPOSED ACTIVITIES FOR FY14

N: $1,583,000

FRM: $1,583,000

RC: N/A

H: $1,584,000

EN: N/A

WS: N/A

UIS "Core" Team:

1. Develop charter and establish team including AM as an integral function.
2. Develop and implement overall UIS Program Management Plan (PMP).
3. Engage all Civil Works missions/functions to guide/accomplish the following major efforts.

Lifecycle Portfolio Management:

1. Continue development and implementation of an operational condition assessment methodology for Corps of Engineers infrastructure.
2. Continue development of the Water Infrastructure Systems Data Manager (WISDM) to organize and display Corps portfolio information.
3. Continue addressing operation and critical maintenance performance measures in the Facilities and Equipment Maintenance (FEM) system.
4. Complete initial assessment of data compiled by the Op Order.

Comprehensive Watershed Analysis:

1. Continued development of analytical tools for project assessments (to include WISDM, Asset Management Portfolio Analytics (AMPA), and Integrated Budget Evaluation Tool (iBET))
2. Continue to provide dedicated assistance to the watershed budget pilot projects including collaborative techniques, mapping of Corps and non-Corps projects, and options for investigating project linkages.

ACCOMPLISHMENTS:

1. Developed first ever national inventory of Corps assets and projects
2. Completed Asset Management Portfolio Analytics (AMPA) case study and additional demonstrations using FY14 budget work packages
3. Completed Maintenance Management Improvement Plan (MMIP) pilots with report, and implemented Phase 1 – Critical Assets
4. Begun analysis of alternative financing options:
    a. Completed first White Paper on options
    b. Holding third working meeting with private firms on investigations of options
    c. Completed one watershed pilot partnering with SPD on successful budget process.
        i. Developed initial decision support software WISDM and iBET
        ii. Initiated collaborative processes for watershed process
5. Developed initial process to complete condition assessments for Corps assets.
6. Continued data QA/QC in the real property information database and system to meet annual FRPP requirements.
7. Continued development of baseline operational condition assessment and risk processes for FRM, Coastal navigation structures, Hydropower and Recreation.
8. Trained MSC teams and began implementing OCAs at selected representative FRM and coastal projects. Implemented condition assessment and risk and consequence methodologies across

portfolio of infrastructure assets for inland navigation which will feed future budget work packages.

9. Integrated results to date from condition and risk processes for USACE infrastructure and Maintenance Management Improvement Plan into FY15 Budget Guidance.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Budget Management Support for OM Business Programs
Performance Based Budgeting Support Program
Recreation Management Support Program
Stewardship Support Program
Optimization Tools for Navigation (OTN) Program

AUTHORIZATION:
Performance Based Budgeting Support Program: The Government Performance and Results Act of 1993 (GPRA) and under general authorities contained in various laws.

Recreation Management Support Program: This program is conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

Stewardship Support Program: This program is conducted under the authority of ER 1130-2-540, Chapter 7.

Optimization Tools for Navigation (OTN) Program: Efforts are necessary to provide practical quantitative and predictive tools and data for minimizing and optimizing the costs of dredging of Federally-sponsored navigation projects. The objective is to be able to identify more efficient and effective management strategies for existing navigation infrastructure and to improve the analysis of proposals to deepen and widen channels. These efforts will help lead to an improvement of channel design criteria across the Corps, for the U.S. Navy, and other government/academic institutions.

LOCATION AND DESCRIPTION: These are national programs.

CONFERENCE AMOUNT FOR FY 2013: $7,042,000 2/

BUDGETED AMOUNT FOR FY 2014: $7,042,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

ALL: Performance Based Budgeting Support Program. $4,000,000 will provide enhanced continuing support of Civil Works O&M integrated business line information systems; centrally distributed performance measures, outputs and system inventory information; and evaluation of new measures through the Performance Based Budgeting Support Program. FY 2014 funds will also support enhanced development of cross business output-result oriented performance measures of the incremental return on investment in Corps Civil Works program area including the investigation, acquisition and integration of decision-making software. The funding provides enhanced support for all business lines but with an increased focus for flood risk management, water supply, environmental restoration for the data entry modules and integration: The President's management agenda and GPRA requires that the Corps implement performance based budgeting for Civil Works Operations and Maintenance. The Performance Based Budgeting Support Program addresses this requirement by the collection, management and distribution of data; seeking new methods for linking performance to annual budget requests; and for analyzing the potential economic impacts on service to customers of varying budget levels.
a. Civil Works Business Function Information: Provides critical data and information related to Civil Works project inventories, outputs and performance measures; and for the operational and strategic management of Corps' projects, programs, budget development and studies that directly support the Navigation, Hydropower, Recreation, Environment (Stewardship, Compliance, and Restoration), Water

Supply and Flood Risk Management Business Line missions. This information supports the Corps O&M program and is the sole source for the Corps, other Federal agencies, partners, stakeholders, and public. These funds include supporting the collection, database management, integration, standardization, operation, enhancement, quality control, user assistance, training, compliance with security requirements and ACE-IT services. The IT activities are also reported under OMBIL-Plus in ITIPS and the annual OMB 300b submittal accounting for $1,423,741 of the overall OMBIL-Plus costs. Funding for this program increases the Corps' ability to produce efficient, effective, and timely performance measures for budgeting, management and the prioritization of capital investment decisions.

b. Civil Works Performance Measurements: Work includes improvement and integration of business line performance measurements to be incorporated into the budget decision-making process; support for the Office of Management & Budget's performance driven initiatives; and support for the future Corps budget preparation process. Efforts focus on the refinement of corporate performance principles; and program and project level performance measures that focus on anticipated performance and output at different levels of funding. Aligns and integrates with the O&M business processes - navigation, hydropower, flood risk management, recreation, water supply and environment. These measurements, at different organizational levels, provide the analytical basis to identify the incremental return on investment in Corps programs at various funding levels and to make adjustments in priorities both at the program and project levels concerning efficiency of facilities or services. Comparison of across business lines measurements among projects at all levels helps focus management attention on the priorities of programs and projects related to capital investments principles.

c. Civil Works Business Analysis: This task analyzes data using statistical and other analytical techniques and tools to uncover relationships among budget, expenditures and performance within and between Corps business line processes. The relationships and statistics drawn from the data will provide evidence to support capital investment priorities and decisions increasing the Corps ability to delivery business line service in the most efficient and effective manner. This task will also develop effective products to explain relationships found in the data and allow decision-makers to visualize cause and effect. This task links the data gathering, collection and distribution, and use of data in the decision-making process.

N: Optimization Tools for Navigation. $392,000 will be used for the Optimization Tools for Navigation (OTN) Program to continue the deployment and maintenance of the National Navigation Operation & Management Performance Evaluation Assessment System (NNOMPEAS) capabilities and methodology and further its use as a budgeting tool and general project evaluation tool. Funding will also be used (to the extent available) for continued maintenance of the Channel Analysis Design Evaluation Tool (CADET) and development of a vessel lines library to allow use of CADET without proprietary hull line information and to complete technology transfer to USACE so that USACE can independently support general update and maintenance of the algorithms integral to CADET. Funds will also in part be applied in support of continued compilation of dredging cost and quantity data at the channel segment level through implementation of changes to the Resident Management System (RMS) database and to implement changes to NNOMPEAS deemed critical by field analysts to more efficiently facilitate project evaluation and analysis for O&M and new work where applicable.

To maintain the Nation's Federal navigable coastal and inland waterways, nearly 230 million cubic yards of material are dredged in the U.S. annually. In addition, these quantities are likely to increase under proposals for deeper and wider channels to support emerging commercial cargo vessel designs. This initiative will enable the Corps to provide a more credible and informed evaluation of maintenance requirements, based on the economic return. The Corps is developing metrics that would help demonstrate the incremental return-on-investment (ROI) from an increase or decrease of dredging funds and associated maintenance at any specific location. NNOMPEAS is being developed to demonstrate whether such a metric can be provided across all coastal deep-draft harbors and waterways. This tool

uses domestic and foreign trade data to determine and analyze the loaded or immersed drafts and related utilization of vessel cargo-carrying capacity for all recorded cargo vessel calls for individual harbors and channels. The system in turn can provide for the estimation of incremental transportation cost benefits foregone with reduction or absence of maintenance for waterway depth, and of the transportation cost savings with a limited increase in depth. This could offer the potential to optimize maintenance dredging requirements for individual channel reaches and across much of the overall USACE dredging program. A companion tool being developed under the OTN program is CADET, which will allow sophisticated vessel hull modeling not previously available. IWR is conducting this modeling activity jointly with the USACE Engineering Research and Development Center (ERDC) and the U.S. Naval Surface Warfare Center (NAVSEA-Carderoc). CADET will render advanced technologies for methods of analysis and compilation of new physical and numerically-generated data sets descriptive of vessel movement and response within confined waterways and offshore channel areas subject to significant wave climate.

FRM: N/A

RC: Recreation Management Support Program. $1,650,000 will support the implementation of the Recreation Strategic Plan which will guide many of the support activities performed this FY particularly in the areas of efficiency evaluation, communication and partnerships. The Recreation Budget Evaluation System (Rec-BEST) will be refined to increase the capability to monitor and report Recreation performance measures and evaluate and prioritize budget submissions in response to OMB guidance, also to better link with the Asset Management and risk informed budget process. The Recreation module of the Natural Resource Management Gateway will be further developed to address high priority needs. Demonstrations will be conducted to identify and communicate the benefits of the Corps recreation program and improve effectiveness in addressing the needs of ethnic minority visitors. Emphasis will be placed on improving recreation use monitoring procedures that will be incorporated into recreation performance measures. Customer satisfaction survey methods and benchmarking capabilities will be refined and fully integrated into program performance measures. Technical support will be provided to field staff to implement improved procedures. Support will be provided to standing Natural Resource Management (NRM) committees and task forces including: Partnership Advisory Committee, Ranger CoP, Water Safety, Career Development etc. Support will be provided to Headquarters Recreation program staff regarding strategic planning, development of program evaluations, staffing evaluation and other high priority Headquarters initiatives. Provides resources for evaluation tasks associated with the implementation of the National Recreation Program Road Map.

The recreation program serves almost 370 million recreation visitors and generates about $40 million in revenue annually. Visitors spend over $16 billion annually to engage in recreation at Corps projects; over 270,000 full and part time jobs are associated with this spending.

The RMSP supports the recreation program through the conduct of focused management studies to improve operational efficiencies and the provision of technical assistance, to include technology transfer and technology support and maintenance for recreation specific automated information systems. The RMSP supports strategic planning for and performance monitoring of the Corps recreation business program, subject to the Government Performance and Results Act (GPRA).

The RMSP has 3 major components, which together provide comprehensive support to the Corps Recreation Business Program:

1. Focused Management Studies. RMSP provides focused management studies and reports to acquire and analyze information about recreation trends, accessibility, emerging issues, user conflicts, visitor diversity, use fee impacts and similar elements affecting the Corps recreation program. Analyses are

conducted to support the recreation area modernization program, implementing facility and service standards, and in similar product delivery improvement efforts. Information and technology transfer pursuant to these studies is funded by the RMSP. Ongoing trends analysis provides valuable data on which to base decisions about necessary short and long term adjustments to the program to meet public needs.

2. Management/Technical Assistance. RMSP provides technical assistance to the Recreation Community of Practice in the development of management tools, which quantify recreation program outputs and relate them to customer needs and budget allocations for the purpose of measuring performance. This includes gathering and analyzing information about customer satisfaction with the Corps recreation program. RMSP assures the field workforce is equipped with "state-of-the-art" skills and knowledge to deal with a rapidly changing public. RMSP provides technical support and maintenance of performance based budgeting tools, visitation monitoring and analysis systems, fee collection and reporting, economic analysis, facility inventory and condition assessment, and similar automated information programs. RMSP provides short-term assistance to projects in solving specific technical problems.

3. Support to Recreation Program Strategic Planning. Funding to support the activities of the Recreation Leadership Advisory Team (RLAT) is included in this program. The RLAT is composed of representatives from the division, district and project levels of the Corps natural resources management program. It provides input, advice and support to the Corps strategic planning for the recreation business program.

H: N/A

EN: **Stewardship Support Program. $1,000,000** will conduct focused management action studies and recommend guidance to address high priority program efficiency and effectiveness concerns, including responses to new protocols for asset and risk management, regulation changes and administration priorities through the Stewardship Support Program (SSP). Efforts will continue in support of performance based budgeting including further development of performance measures, development of strategies to improve program outputs and outcomes, and refinement of E-S BEST and related guidance to monitor program performance and risk analysis. Progress in recent years on developing standards, published protocols and web-based data entry programs have resulted in improvements in advancing completion of the inventories and will result in expanded data from national GIS analysis to prioritize work during declining or flat budgets. Increased technical support to the field will provide training and guidance to assist in revision to performance measures during 2014, as needed to meet new Civil Works transformation implementation and recent new High Priority Goals of OMB. The SSP will also continue support of the Environment-Stewardship Community of Practice (CoP) including further development of the NRM Gateway for information and technology exchange. These activities will provide benefits in increased program effectiveness through implementation of assessment recommendations. Improved program performance will be facilitated through increased CoP access to best practices and policy guidance, and effective development and execution of performance based budgets.

The Stewardship Support Program (SSP) was established by regulation in FY 02 to provide broad support to Environment-Stewardship function at operating projects by assisting in the identification of national program needs, the development of new national program activities, strategic program planning, and the recommendation of national stewardship program funding priorities. Support will be provided in refining the Environment–Stewardship business program strategic plan and goals, and budget processes, to address the targeted outcomes of the overall Corps CW Strategic Plan, using input from the Stewardship Advisory Team, other associated Corps business programs and stakeholders. Goals and

objectives have been refined, and actions will be identified to achieve them. Funding this program from a single source reflects the nationwide application and supports standardization in program direction and outputs. The program will continue to meet business line needs involved with the Corps Civil Works Transformation, initiating asset management and risk assessment along with additional changes in the administration focus on the America's Great Outdoors (AGO) Initiative and long term sustainability. The SSP supports the Environment–Stewardship program by addressing issues or initiatives that have a broad applicability to many USACE Civil Works projects.

The three basic components of the SSP are:
(1) Focused Management Actions and Studies. These activities are to implement a course of action or practice within field office activities, a region, or nationwide. Examples of management actions might include developing/ assembling an array of management practices for establishing riparian habitat, or creating a forum to share common experiences, build teams, and disseminate information. Examples of management studies might include geospatial tools for use at the projects or conducting studies on management of threatened and endangered species and meeting biological opinion requirements
(2) Policy Guidance and Management Support. Such activities relate to the development and/ or implementation of guidance. Examples of policy guidance included facilitating cooperative agreements with stewardship non-governmental organizations, or amending the annual Budget Engineer Circular to provide emphasis on new environmental threats or nationally significant resources. Mapping stewardship performance and adjusting to more integrated watershed and asset management will be a focus for FY 14. Funding to support the activities of the Stewardship Advisory Team (SAT) is included in this program. The SAT is composed of representatives from the division, district and project levels of the Corps Environmental Stewardship Program. It provides input, advice and support to the Corps strategic planning for the Environment-Stewardship business program.
(3) Information Exchange. These activities are designed to build, integrate, and share our knowledge base to support greater understanding of the environment and the impacts of program work.

WS: N/A

OTHER INFORMATION:

ACCOMPLISHMENTS IN PRIOR YEARS:

Performance Based Budgeting Support Program. Included were newly fielded centralized natural resource, water supply collection system and user's training in OMBIL Plus data entry and access. The One-stop access for much of Civil Works budget performance information was expanded for budget submittals in lieu of separate data calls. An integrated data set for all business lines was created with data for FY1999-2011 providing trend information for analysis. Performance data was merged with P2 for use in the navigation budget development process eliminating data calls and providing nationally standardized information. The inclusion of asset management and capital investment principals were considered.

Recreation Management Support Program. Recent accomplishments include conducting an evaluation of NRM Staffing levels, support for the Recreation Strategic Planning team, development and implementation of a national survey of Park Rangers, refinement of the OMBIL Recreation module and development of platforms to market the CE recreation program on social media websites, (i.e. FaceBook and YouTube). Other past products include Recreation Budget Evaluation System (RecBEST), visitation estimation methodology and data collection and reporting tools, economic impact methodology and analysis tools, customer satisfaction survey and benchmarking tools implemented at all CE projects, studies on recreation preferences of ethnic groups including cross-cultural communication issues, and

support for development of a strategic context as a foundation for transitioning to a performance based environment, to include performance based budgeting. The Natural Resources Management Gateway was developed as a knowledge management tool for the NRM community and is compatible with other Corps KM and Community of Practice initiatives. The Corps Lakes Gateway was developed and provides information to millions of visitors annually on recreation opportunities at Corps projects (in FY10 over 45 million page views). The Corps Lakes Gateway also delivers Corps recreation information to the interagency RecreationOneStop project in support the Administration's E-GOV initiative. Guidance and appropriate tools were developed to improve interpretive services associated with the CE recreation program that advance the public's understanding of the environment and the Corps Environmental Operating Principles. Support to Headquarters was provided to refine the recreation business program strategic plan, utilizing input from the RLAT and stakeholders. Goals and objectives were refined, and actions identified to achieve them. Innovative partnership approaches were developed and field guidance prepared to improve stakeholder participation. Stakeholder outreach was conducted to develop partnerships for strategic initiatives.

Stewardship Support Program. The allocation of project operations and maintenance funds to conduct specified nationwide (multiple project) activities to improve the efficiency and cost effectiveness of the Environment-Stewardship business program has been employed, with subcommittee staff knowledge and concurrence, since the late 1990s for activities similar to those identified for FY 2014. Past products of the Stewardship Support Program include the initial set of Environment-Stewardship program performance measures, which are in accord with the Government Performance and Results Act and used to measure and monitor priority program outputs and outcomes; the Stewardship module of the Operations and Maintenance Business Information Link (OMBIL), which receives and stores selected data concerning the stewardship of project natural resources, and which provides for retrieval of that information by all levels of the Corps; the pilot version and subsequent refinements of the Environment-Stewardship Budget Evaluation System (E-S BEST) used to assist in developing budget scenarios and ranking budget proposals. Components of the Environment–Stewardship portion of the Natural Resources Management (NRM) Gateway, a knowledge management tool for the NRM community, have been completed and others are underway. Support to Headquarters was provided to develop and refine; the Environment-Stewardship business program objectives and budget criteria, the program management plan for the Environment-Stewardship Community of Practice, and the revision of the Environment-Stewardship program regulation. Formulation of program decision tool to evaluate the threats to, and significance of CE managed natural resources was initiated in FY 13 and will continue into FY 14

Optimization Tools for Navigation. Funds in FY 13 will allow maintenance of the core CADET vessel hull modeling effort in conjunction with ERDC with reduced support from NAVSEA-CARDEROC, and the initiation of work and requirements to develop a deep-draft self-propelled vessel lines library. Work will continue on the NNOMPEAS initiative with updating vessel transportation and vessel operating cost data for additional years through the latest year of data availability, increasing or expanding vessel transportation trips and costs to over 115 to 120 coastal harbors nationwide, initial software development to link foreign trade databases with vessel characteristics and vessel movement databases, initiating second-phase modifications to the RMS database for collecting dredging costs and quantities for discrete channel segments, and continued deployment of the modified RMS database through training sessions for coastal District operations staff. Continued(ing) use of NNOMPEAS for further development of efforts to measure incremental transportation costs and benefits, and development of relative rankings based on ROI for major coastal harbors under ongoing initiatives for Value-to-the-Nation (VTN) and for HQUSACE O&M program budgeting input. Currently NNOMPEAS is also being employed for evaluation of vessel calling patterns and supporting load factor analysis (LFA) critical to coastal deep-draft studies, and the evaluation of vessel diversion for offshore wind farm development. Correspondingly, efforts for CADET

will involve deployment and training for use on coastal waterway projects through FY 13 which will support better evaluation of depth needed in offshore environments with simultaneous objectives of minimizing related dredging costs.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Coastal Inlets Research Program

AUTHORIZATION: Authorization for the Corps of Engineers' Engineer Research and Development Center (ERDC) to conduct R&D is codified in 10 U.S.C. 2358: "The Secretary of Defense or the Secretary of a military department may engage in basic research, applied research, advanced research, and development projects that are necessary to the responsibilities of such Secretary's department in the field of research and development."

CONFERENCE AMT. FOR FY 2013: $2,700,000 2/

BUDGETED AMT. FOR FY 2014: $2,700,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The Corps operates and maintains more than 1000 coastal navigation projects that cover 13,000 miles of coastal navigation channels, with a limited O&M budget. Coastal inlet navigation channels must be maintained in a complex environment of waves, tidal and wave-induced currents, sediment transport, and vessel-induced flow and wake. In FY 2010, the Corps spent approximately $1.2 billion in maintenance dredging of 202 million cubic yards from Federal navigation channels. Adjusted for inflation, dredging costs have increased approximately $12.8 million/year (from $1.53 to $4.62 per cubic yard) from FY 1963 through FY 2010[1]. Dredging costs are likely to increase in the future because of increasing fuel, mobilization, and demobilization prices. Additionally, to remain competitive, harbors and ports must deepen and widen navigation channels to accommodate larger vessels; however, deeper and wider channels are more efficient sediment traps, therefore increasing shoaling and O&M costs. Modifications to coastal inlet channels and jetties can have a profound effect on the integrity of the navigation structures, adjacent beaches, estuaries, ecosystems and regions. Demand for regional sediment management practices and mitigation for engineering activities includes innovative creation of nearshore berms with dredged sediment intended as a source to nourish neighboring beaches. Renewable, cost-effective placement sites for dredging must also be designed such that sand moves onshore, fine sediments are dispersed offshore, and re-deposition into the navigation channel is minimized. Such projects require characterization of hydrodynamics, wave forcing, sediment transport, and morphology change, as well as geomorphologic approaches. Thus, navigation project O&M, structure integrity and implications of ongoing and future dredging actions must be considered within a sediment-sharing inlet system. The Corps needs to advance knowledge and tools to better predict future channel shoaling, and to make transparent and uniform decisions on prioritization of funding. This applied research and development is necessary to provide quantitative and practical predictive tools and data to reduce the cost of dredging for Federal navigation projects, maintain inlet jetties, identify potential unintended consequences, mitigate for engineering activities related to navigation channels, prioritize maintenance options within budget constraints, and support national security efforts to protect waterways and ports. The Coastal Inlets Research Program provides tools to engineers and decision makers for developing reliable solutions and practices to reduce the cost of maintenance and operation of Federal navigation projects.

PROPOSED ACTIVITIES FOR FY 2014:

Structures and Navigation Focus Area

- Continue development of the Channel Portfolio Tool (CPT), especially formal, seamless linkages to other Navigation Business Line tools, applications, and databases such as Automated Identification System (AIS) vessel transit data, tide and wave buoy data, and HydroSurvey bathymetric data. Produce documentation of conceptual framework and how-to guidance in online help and technical notes. Continue maintaining the public version of CPT. Provide

[1] http://www.iwr.usace.army.mil/ndc/dredge/ddhisMsum.pdf .

support to the FY16 Civil Works budget development cycle to include multiple business lines via an optimization approach developed through the Asset Management initiative.

- Through application of CPT and the Coastal Structures Management Analysis and Ranking Tool (CSMART), quantify and document the role of waterborne transportation within the broader intermodal freight system. Direct annual waterway maintenance actions in terms of overall supply chain performance and availability of alternate modes of transportation. Formulate systems optimization strategies that allocate limited O&M funds according to overall, national performance objectives, rather than project-based metrics.
- Continue supporting USACE Structure Asset Management and Navigation Channel Asset Management via CSMART and CPT, respectively.
- Rollout a statistical analysis package and data mining capability for the vast archive of AIS data presently being maintained by the U.S. Coast Guard as well as by the Corps via the Lock Operations and Management Application (LOMA). This application will enable Corps personnel to quickly analyze and visualize the manner in which commercial vessels maneuver through navigation projects. The large amounts of available data enable quantifiable measures of project functional performance, such as effectiveness of breakwaters at suppressing wave action, presence of adverse currents before and after dredging activity, and possible early-detection of shoaling and other channel obstructions.
- If pilot study initiated in FY13 was successful, continue advancing application of the Channel Analysis and Design Evaluation Tool (CADET) to calculate vessel underkeel clearance and AIS data for use in CPT. Wave and current forcing from the Coastal Modeling System (CMS), vessel types and dimensions from AIS, 3D Channel Framework and recent bathymetry data feed CADET which calculates the underkeel clearance and viability of vessel transit given the shoaled depths for use in CPT.
- Develop and release beta version of GeoDat, a web-based data access and analysis tool to facilitate selection, evaluation, manipulation, generation of report-quality figures, and re-formatting of geospatial data for import to numerical models. GeoDat will access existing online geospatial data sources (bathymetry, shoreline position, 3D channel framework, port and harbor infrastructure, reefs, land elevation, building footprint), facilitate viewing and processing online and downloading to the Surface-water Modeling System (SMS) for use in model applications.
- Complete applied studies with the Coastal Modeling System (CMS) at multiple sites in support of USACE Districts.

Sediment Management Focus Area

- Release version 2.0 of the web-based Tidal Analysis Toolbox to provide time-series analysis of tidal data including harmonic analyses, tidal prediction, data interpolation, data filtering, and principal component analysis. Conduct webinar for District employees to transfer technology.
- Release version of enhanced CMS-2D in the Surface Water Modeling System (SMS). The enhanced CMS-2D includes semi-analytical representations of vertical velocity (due to wind, bottom friction, helical flow, and Coriolis) and sediment concentration profiles (due to vertical mixing and settling) resulting in additional dispersion terms which significantly improve nearshore hydrodynamics and sediment transport. Document operation of the enhanced CMS-2D in a Technical Report.
- Release version 2.0 of the Nearshore Berm Calculator (NBC), a planning-level tool to aid in logistics, placement (cross-shore and alongshore), and preliminary design of dredged sediments that are placed in the nearshore for the purpose(s) of providing a wave break to protect nearshore beaches, engineering with nature to allow finer sediments to move out of the system while moving beach-quality sand onshore, and/or migrate onto the beach providing additional storm protection. Because sediment for nearshore berms most commonly is dredged from adjacent navigation channels, location of the berm relative to the inlet is critical to avoid re-handling dredged sediment. Version 2.0 will update empirical guidance with data from field monitoring and modeling with the CMS.

- Release version 2.0 of the 3D Sediment Resource Tool (3DSRT), an ArcGIS module that facilitates calculating volume, location, and extent of sediment resources for use in dredging operations and shore protection. Version 2.0 will upgrade operation of the 3DSRT based on feedback from users as well as the expanding sediment database as users populate 3DSRT.
- Conduct webinars and workshops demonstrating the NBC and 3DSRT.
- Release Version 3 of the regional shoreline and inlet shoal evolution model, GenCade with upgraded channel infilling and shoal evolution processes. Document application in wiki User's Guide. Update the previous User's Guide published in 2012 with recent upgrades, including regional variability in parameters; cross-shore, channel infilling, and shoal evolution processes. Conduct a webinar short-course to teach recent upgrades.
- Upgrade the Channel Shoaling Toolbox with additional historical dredging data; document validation of methods in an online technical note.
- Extend the National Coastal Engineering Index Report Card in development by the Joint Airborne Lidar Bathymetric Technical Center of Expertise (JABLTCX) to forecast future conditions.
- Develop a Regional Model Linkage, Archival and Sediment Budget Calculator to import calculations from GenCade and the Coastal Modeling System (CMS) and create cells and fluxes based on the calculations. This tool will be able to save and transfer fluxes from one region (calculated from either GenCade or CMS) to the next, therefore facilitating a regional planning tool for decision support. The tool archives data, previous model set ups and allows formulation of a calculated regional sediment budget, and is applied to evaluate different engineering alternatives that incorporate forcing from the results of other regions within the domain.
- Update the web-based Inlets Portal with new web tool releases and updated databases for inlet photographs, nearshore berms, and inlet geomorphology.
- Conduct quarterly short-course webinars to teach updates to CIRP products and technology. Conduct in-person workshop at a District office. Continue transferring knowledge and updates through quarterly eNewsletters. Continue supporting the Coastal Inlets Research Program website: www.cirp.usace.army.mil

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	$2,944,000	
Allocation for FY12	$2,620,000	
Conference Allowance for FY13	$2,700,000	2/
Estimated Carry-In Funds	$0	
President's Budget for FY14	$2,700,000	1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Coastal Ocean Data System (CODS) (Formerly Coastal Data Information Program (CDIP))

AUTHORIZATION: Authorization for the Corps of Engineers Engineer Research and Development Center (ERDC) to collect coastal field data is 33 USC 426a which originated with the River and Harbor Act of 1945, which originated in the River and Harbor Act of 1930. The latest Engineering Regulation governing the program is ER 1110-2-1406 dated 1990.

CONFERENCE AMT. FOR FY 2013: $3,000,000 2/

BUDGETED AMT. FOR FY 2014: $3,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The integration of the work described below is producing a transformational waves capability for the Corps and Nation. Ocean observations are used to validate numerical hindcast models that calculate wave information over 30 to 50 year periods on the Atlantic & Pacific coasts, Gulf of Mexico and Great Lakes. This wave climate information is combined with storm wave information producing validated long-term and storm waves that drive our next generation risk-based coastal models.

Ocean waves deliver energy to the coast and impact Corps projects and operations. Wave information is imperative for products for operational guidance of USACE dredging, navigation, maintenance, and emergency operations. Wave observations are used in the development and validation of new hindcast wave models and for storm analysis and new wave products are transforming how the Corps, other Federal Agencies, States, Academia, Public, and the Nation use and access accurate wave information. High quality wave information is required for the design of storm protection and navigation projects; to implement Regional Sediment Management (RSM) strategies; and as boundary conditions for all coastal modeling. Inaccurate and insufficient coastal wave data can result in project operation and design uncertainty. Long-term (multiple decades) wave and storm information are also required to determine how climatic changes and extreme events will impact Corps' facilities, projects and mission operations.

Availability of high quality, long-term coastal wave observations varies nationwide with gaps in critical regions, notably the coastal Gulf of Mexico and the mid-Atlantic. For example, when Hurricane Katrina made landfall, there were no high quality directional coastal wave measurements along the central Gulf coast, which hampered post-Katrina forensic efforts. The mid-Atlantic—home to many authorized Corps projects—has been underserved, but this program has improved that situation such that during the passage of Hurricane Sandy in 2012, 10 CODS supported wave gauges (many cooperatively funded) provided real time wave information. The importance of available wave information was highlighted as a critical issue by the USACE's Coastal Working Group of the Hydraulics, Hydrology, and Coastal Community of Practice in a survey on data requirements back in 2009. A request echoed again in 2012.

Besides using data collected by the Corps, our engineers depend on observations collected by others. Because of the Corps interest and expertise in waves, this program has been involved in the global effort to test and evaluate various wave-measuring systems. Evidence indicates that differences in the quality of wave parameters depend on the platform/sensor combination being used, with the potential that during extreme storm scenarios, there could be as much as a 50% over-estimation in the significant wave height from commonly used platforms. This activity is guided under the international Intergovernmental Oceanographic Commission (of UNESCO), and the World Meteorological Organization.

The over-arching objective of the Coastal Ocean Data System (CODS) is to provide high-quality long-term coastal wave information along with storm-event data nationwide, to develop and provide tools for using wave and other data for managing coastal sediment, and to support sustainable coastal and navigation projects under a changing climate.

Coastal Ocean Data System activities include: 1) Wave Observations, 2) Wave Information Studies, 3) Comprehensive storm-event data sets, and 4) Participation in the Integrated Ocean Observing System (IOOS).

Wave Observations: Observation efforts are conducted in partnership with the NOAA National Data Buoy Center (NDBC, www.ndbc.noaa.gov) and through the state of California, the Scripps Institution of Oceanography that maintains a network of shallow-water coastal gauges under their Coastal Data Information Program (CDIP, http://cdip.ucsd.edu). These observations are high resolution and of appropriate accuracy for use in Corps wave information hindcast efforts for validation. The data are automatically provided to national data servers of NOAA and are publically available. The popularity of the program is evident from the usage statistics, typically 320,000 hits per day (during 2010) and over 4 gigabytes of daily data downloads. Usage has been increasing 20-30% per year. While CDIP observations have been concentrated in California, recent additions have expanded the coverage nationally including locations relative to major US ports. Much of the recent CDIP expansion has occurred through collaborating with the regional associations of IOOS, where they purchase, deploy, and maintain a buoy, leveraging the Corps investment. In 2009, the Interagency Ocean Observation Committee (IOOC) finalized the first *National Operational Wave Observation Plan* developed by the USACE in collaboration with the NOAA IOOS program office. This was a science-based assessment of the nation's wave observation requirements that identified observation gaps and for the first time, defined a measurement accuracy requirement sufficient to satisfy the directional resolution required by the Corps and others. The plan has already led to national improvements. An update to the Plan began in FY12 and is a milestone requirement of the National Ocean Policy (NOP). The update includes a re-assessment of the number, location, and priority for new locations; tighter integration between wave observations and wave modeling; and strategic recommendations for new products to meet national needs for wave information.

Wave Information Studies. The objective of the *Wave Information Studies* is to provide high-quality coastal wave information, wave analysis products, and decision tools nationwide. The focus is to integrate measurements with model results so that the Corps has access to all available wave information (real-time observations, model hindcasts, and long-term archives) to perform their mission. Wave hindcasts use high quality wind fields and the latest wave modeling technology. To satisfy the Corps requirement for risk-based designs, at least 20-30 years of continuous wave climatology data are required. Hindcast datasets provide hourly wave information for locations every few miles along the coast. Because of this coverage, the Corps, the coastal engineering community, and the public for coastal studies routinely use these datasets. The long-term hindcast wave data are accessible through a website that receives over 16,000 monthly requests for data downloads (http://wis.usace.army.mil/). Available observations are used to confirm and validate the hindcast/model data, for quantifying actual conditions, and for understanding long-term wave climatology. Under this activity, wave data users are able to access either hindcast or observed wave data transparently and select powerful analysis products and tools for wave climate and extreme event planning and for decision making using either observations or model estimates, or both.

Storm Event Data Sets. Corps project designs require estimates of the extreme conditions that define and quantify an acceptable level of risk. Because project life cycles can be 50-100 years, it is desirable to extend the extreme event climatologies to be as long as possible, much longer than the maximum wave observation record, which is only ~35 years. This also suggests going back in time, defining extreme events (meteorological, and/or hydrodynamic), develop the wind forcing, and perform wave hindcasts. The wave climatology (similar to that now used by FEMA) based on storm events could be extended over possibly 60 to 70 years. Storm event data of interest besides waves include storm track, wind fields, atmospheric pressure, surge levels, wave runup and beach/channel response.

The Integrated Ocean Observing System Participation: CODS data, including the CDIP observations are a Corps contribution to the *Integrated Ocean Observing System* (IOOS). They support the Coastal Hazards topic under the National Ocean Policy. IOOS is an interagency activity with NOAA as the lead agency. Participating agencies pool, share and coordinate their ocean observations for the benefit of all. To facilitate this coordination, the Corps participates in IOOS workshops, regional associations, and

meetings. The Corps has also established a liaison with the IOOS program office.

PROPOSED ACTIVITIES FOR FY 2014:

- Continue to support the activities of IOOS by participating in the Interagency Ocean Observation Committee (IOOC). Promote the involvement of Corps District and Division offices in their local IOOS regional associations through meetings and workshops. Continue to serve on the IOOS Quality Assurance of Real-time Oceanographic Data (QUARTOD) Board of Advisors and other IOOS committees.

  $1.4M

- Sustain the directional wave measurements presently conducted by the NOAA NDBC and Scripps Institution of Oceanography (SIO) for the Corps under the Coastal Data Information Program. Continue the intra-measurement evaluations conducted under the Joint Oceanographic Commission of Oceanography and Marine Meteorology (JCOMM). Coordinate upgrades of NOAA NDBC directional measurement capabilities; collaborate with SIO, NOAA NDBC to leverage the Monterey Bay Buoy Farm (site for intra-measurement evaluations).

  $1.2M

- Release of beta version (limited data set/basin specific) of model and measurement databases to CSTORM-DB. Continue to expand the product portfolio based on interaction with Corps field offices (via Coastal Working Group and selected staff elements).

  $200K

- Continue development of the Corps Navigation and Coastal Databank and data integration framework to ensure Corps data are available to the coastal community. This includes waves, tides, channel surveys, regional coastal mapping products, and a range of related data produced by the Corps and needed by the Corps, other Federal Agencies, and the public.

  $100K

- Continue investigation of measurement gap filling based on model results.

  $100K

ACCOMPLISHMENTS IN FY 2013

- Continued to support the activities of IOOS by participating in the Interagency Ocean Observation Committee (IOOC). Promoted the involvement of Corps District and Division offices in their local IOOS regional associations through meetings and workshops. Continued the 50% Corps liaison to the NOAA IOOS program office that started in FY10

- Finalized the update to the *National Operational Wave Observation Plan* as required by National Ocean Policy (NOP). Continued coordination with the international wave measurement community under the governing body of the Joint Oceanographic Commission on Oceanography and Marine Meteorology (JCOMM, http://www.jcomm.info/wet). With NDBC, CDIP and Environment Canada, analyzed new observations comparing different platform/sensor configurations (Monterey Bay Buoy Farm). Increased the inter-operability of the WAVE EvalTools (used for intra-measurement evaluations) and established sensor performance metrics for the national and international wave measurement communities.

- Sustained the wave observation program including the directional wave measurements presently conducted by the NOAA NDBC and Scripps Institution of Oceanography for the Corps under the Coastal Data Information Program

- Updated the Atlantic and Gulf of Mexico wave hindcast products through 2010; updated Lakes

Superior, Ontario and Huron (1980 through 2009). Procured updated wind fields for all domains through 2012 to initiate the annual hindcast update.

- Initiated the merging of the wave databases (model and measurement) into CSTORM-DB. Increased the number of products to perform desktop analysis of long-term wave estimates and extreme storm event scenarios.

- Investigated using model results to fill gaps in measurement results to provide improve the completeness of the long-term wave observations in order to better quantify extreme storm event conditions.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	$0	
Allocation for FY12	$4,369,000	
Conference Allowance for FY13	$3,000,000	
Allocations through FY13	$3,000,000	2/
Estimated Carry-In Funds	$0	
President's Budget for FY14	$3,000,000	1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Responses to Climate Change at Corps Projects

AUTHORIZATION: Various authorities including Section 216 of the River and Harbor and Flood Control Act of 1970, Section 731 of the Water Resources Development Act of 1986, specific project and purpose authorizations, and Executive Order 13514.

LOCATION AND DESCRIPTION: O&M Remaining Item, Nationwide. The Responses to Climate Change Program provides planning and engineering guidance along with the supporting tools required so that future infrastructure is designed to be sustainable and robust to climate changes, such as changes in temperature, precipitation, and sea level, increased variability of floods and droughts, increases in very heavy precipitation event, changes in the form of precipitation (snow vs. rain), and altered storm intensity, frequency, and track. Because climate change and water availability and quality are so closely linked, climate change has the potential to affect almost all the missions of the U.S. Army Corps of Engineers (USACE), particularly the operations and water management control activities associated with the existing capital stock of USACE water projects. Continued effective and efficient water operations in both the short (5-10 years) and longer term (10—100 Years) require nationally consistent and regionally tailored water management adaptation strategies and policies. The Responses to Climate Change Program is partnering with other Federal science and water management agencies, and other stakeholders, to develop and implement practical, nationally consistent, and cost-effective approaches and policies to reduce potential vulnerabilities to the Nation's water infrastructure resulting from climate change and variability. These policies balance authorized project purposes project operations and water allocations with changing water needs and climate-driven changes, working in close coordination with a wide variety of intergovernmental stakeholders and partners

CONFERENCE AMOUNT FOR FY 13: $ 5,000,000 2/

BUDGETED AMOUNT FOR FY 14: $5,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 14:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN: $5,000,000 will be used to continue development and implementation of methods for risk-based decision making that incorporate future climate uncertainty into USACE decisions with specific application to ecosystem restoration, flood risk management, and water management. Support integrated water resources management frameworks, including integrated flood and drought risk management and adaptive management, as outlined in the National Action Plan Priorities for Managing Freshwater Resources in a Changing Climate. Provide practical guidance and policies for planners and engineers to deal with hydrologic frequency analysis under changing conditions. Continue vulnerability assessments of existing portfolio of USACE Civil Works systems and projects; assess vulnerability of ecosystems impacted by USACE projects and systems. Conduct additional pilot studies on river basin systems and coastal regions in coordination with other Federal agencies and state and local stakeholders to assess vulnerability and adaptation strategies. Support regional climate change adaptation efforts that include

collaboration among other Federal agencies, states, tribes, local governments, and other stakeholders.

WS: N/A

OTHER INFORMATION: USACE is coordinating with other Federal and State agencies on adaptations to climate change for water resources and coastal management, including the U.S. Geological Survey (USGS), U.S. Bureau of Reclamation (Reclamation), National Oceanic and Atmospheric Administration (NOAA), the Environmental Protection Agency (EPA), the Federal Emergency Management Agency (FEMA), the U.S. Department of Transportation (USDOT), and other Federal, state and local agencies. The activity provides resources to support the development of consistent policies among Federal agencies toward climate change.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT NAME: Cultural Resources (NAGPRA/Curation)

AUTHORIZATION: The Native American Graves Protection and Repatriation Act (NAGPRA), P.L. 101-601, enacted on 16 November 1990 contains data gathering, reporting, consultation, repatriation, and permitting provisions that have near-term and long-term implications for Civil Works programs and projects.

LOCATION AND DESCRIPTION: This nationwide project encompasses all civil work districts with the goal of ensuring USACE compliance with the reporting requirements of NAGPRA and the federal curation regulation, 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections.

CONFERENCE AMOUNT FOR FY2013: $4,500,000 2/

BUDGETED AMOUNT FOR FY2014: $4,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The Native American Graves Protection and Repatriation Act (NAGPRA) addresses the recovery, treatment, and repatriation of Native American and Native Hawaiian cultural items by Federal agencies and museums. As defined by the Act, cultural items are human remains, associated funerary objects, unassociated funerary objects, sacred objects, and objects of cultural patrimony. In FY 1994, the Corps began the process of inventorying human remains and associated funerary objects and completing summaries as mandated by the legislation. In addition, the Corps is responsible for curation of cultural resource materials collected from its water resources development projects. A Mandatory Center of Expertise (MCX), located at the St. Louis District, provides overall management of the Corps NAGPRA programs and serves as an information source and a centralized base for curation compliance and contracting. The MCX will facilitate the assurance of consistent nationwide NAGPRA program implementation and operation. The Corps is responsible for the curation of at least 46,255 cubic feet of artifacts collected from its water resources development projects and at least 3,511 linear feet of associated records. Curation of these materials, the largest volume of all federal agencies responsible for this activity, is required by a number of public laws with implementing guidance in 36 CFR Part 79. Corps collections represent over 80 percent of the total DoD collections. These extensive collections are located in hundreds of curation facilities across the nation. The costs are to accomplish NAGPRA work and to fund MCX curation support to the districts. Associated with efforts to complete NAGPRA and because of the fragile nature of many of the artifact and record collections, the MCX is seeking to accelerate the process of effectively managing the Corps curation effort with a project (i.e., Veterans Curation Project) that provides disabled veterans with training and additional job skills in archaeological collections management, while providing for the rehabilitation of the fragile collections. Funding this item will ensure full USACE compliance with NAGPRA legislation and expedite collection stabilization, proper storage, and curation support to all Districts.

PROPOSED ACTIVITIES FOR FY 2014: The MCX and Corps Commands will continue the process of inventorying Native American and Native Hawaiian human remains and associated funerary objects and complete summaries of unassociated funerary objects, sacred objects, and objects of cultural patrimony as mandated by the legislation. Information will be made available to interested individuals and groups through notices in the Federal Register. Through MCX-provided funding, districts will continue to be engaged in formal consultation with tribes for the legislated purpose of repatriating cultural objects for which there are legitimate claims. The MCX will continue to fulfill its chartered activities in support of other military services and DoD and lead in the implementation of an agency-wide, long-term plan for the curation of USACE archeological collections (heritage assets). The MCX will implement the initial phases of the curation task plan, which involves addressing the rehabilitation needs of USACE's most critical archeological collections and continuing the Veterans Curation Project; however, due to increasing costs, the staffing of veterans and the rehabilitation of at-risk archaeological materials and associated records will be reduced in FY 2014. The MCX will also continue to work closely with USACE commands on the implementation of final guidelines and procedures for field collection of archeological materials and the long-term treatment of those collections. In this regard, the MCX will act as a source of expertise for

processing and rehabilitation of USACE collections. Finally, the MCX will provide leadership in the development of a training curriculum on the treatment of heritage assets and working in consultation with all stakeholders and take initial steps to make this training available to USACE and other appropriate DoD managers and decision makers.

OTHER INFORMATION: A Mandatory Center of Expertise (MCX), located at the St. Louis District, was established to provide overall management of the Corps NAGPRA programs and has served as an information source, a centralized base for curation compliance and contracting. The MCX has facilitated the assurance of consistent nationwide program implementation and operation. The MCX, in providing NAGPRA inventories, has assisted in establishing the extent of Corps holdings. Associated with efforts to complete NAGPRA, the MCX began the process of effectively managing the Corps curation efforts. A phased task plan for curation has been developed and is being implemented on at-risk collections. In addition, the MCX supports and leads the Veteran's Curation Project, whereby disabled veterans receive training in proper identification and curation of artifacts. The project gives them additional qualifications for employment after military service and rehabilitates at-risk archaeological collections.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Dredge McFARLAND Ready Reserve

SUMMARIZED FINANCIAL DATA:

Budget Amount for FY 2014	$11,857,000 1/
Allocation for FY 2011	$11,776,463
Allocation for FY 2012	$11,642,400
Budget for FY 2013	$11,840,000 2/

AUTHORIZATION: Section 2047(a) of the Water Resources Development Act (WRDA) of 2007, Federal Hopper Dredges, which amends Section 563, Hopper Dredge McFARLAND, of WRDA 1996, contains a provision requiring the Corps Hopper Dredge McFARLAND to be placed in a Ready Reserve status not earlier than 1 October 2009, and not later than 31 Dec 2009. Directs the Secretary to periodically perform routine underway dredging tests of the equipment, limit any scheduled hopper dredging work, perform any repairs necessary to maintain the vessel in a ready reserve fully operational conditions, and place the vessel in active status for dredging only under specified conditions

JUSTIFICATION: Prior to FY 2010, the total costs of operating the Hopper Dredge McFARLAND were charged to projects funded from the Operation and Maintenance appropriation, and were eligible for full reimbursement from the Harbor Maintenance Trust Fund. The Hopper Dredge MCFARLAND was placed in a Ready Reserve status in December 2009 as required by Section 2047 of WRDA 2007. $12M of annual operating costs that was previously paid by project funds after December 2009 is now required to be provided by this allocation.

PROPOSED ACTIVITIES FOR FY 2014: The Hopper Dredge McFARLAND will not be assigned any scheduled hopper dredging work other than 70 days to perform routine underway dredging tests of the equipment that will be completed in the Delaware River and Bay. These exercises/tests maintain the skills of the crew, and ensure that the McFARLAND remains in a fully operational state, ready to respond to any emergent or urgent dredging requirements. The Hopper Dredge McFARLAND will remain at the dock, with sufficient crew to respond within 72 hours when directed by higher authority for urgent and emergency purposes. The dredge will be placed in an active status in order to perform work in those instances when private industry fails to submit a responsive or responsible bid for advertised dredging, or where industry has failed to perform under an existing contract or other urgent or emergency requirements as determined by the Secretary.

ACCOMPLISHMENTS IN PRIOR YEARS: The Hopper Dredge McFARLAND performed 140 days of "active" dredging work along the East and Gulf Coasts moving in excess of 2 million cubic yards of dredged material in FY 2009. The Dredge McFARLAND was fully funded annually through FY 2009 using O&M funding for which the vessel worked. In FY 2010, her first year in Ready Reserve, the McFARLAND completed her scheduled training exercises in the Delaware River and on two separate occasions, the dredge was deployed under Ready Reserve by USACE Headquarters for a total of 96 days of ready reserve dredging on the Mississippi River's Southwest Pass. The vessel completed her 70 days of training in FY2011 in the Delaware River. The vessel was not called out for ready reserve in FY2011 but did complete a 6 month major shipyard overhaul scheduled around her training exercise schedule. In FY 2012 the vessel was called out for a 30-day ready reserve assignment for Wilmington District at Morehead City, NC and completed the 70 scheduled training days in the Delaware River. In FY 2013 the vessel was called out for a 30-day ready reserve assignment for Wilmington District at Morehead City, NC and is scheduled to complete the 70 scheduled training days in the Delaware River.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Dredge Wheeler Ready Reserve

SUMMARIZED FINANCIAL DATA:

Allocation for FY 2013	$12,000,000 2/
Allocation Requested for FY 2014	$12,000,000 1/

AUTHORIZATION: Section 237 of the Water Resources Development Act of 1996 (WRDA '96) contained a provision requiring the Corps Hopper Dredge WHEELER to be placed in a ready reserve status effective 1 Oct. 1997.

JUSTIFICATION: Section 237 requires that no individual project funds may be used to fund the dredge in its ready reserve status unless the dredge is specifically used in conjunction with a project. Prior to Fiscal Year (FY) 1998, the costs for operation of the WHEELER were charged to projects funded from the Operation and Maintenance appropriation, and were eligible for reimbursement from the Harbor Maintenance Trust Fund. In FY 1998, the WHEELER was placed in a ready reserve status as required by the above referenced section of WRDA '96. Maintenance and repairs costs have risen as the vessel ages.

PROPOSED ACTIVITIES FOR FY 2014: The Hopper Dredge WHEELER, will remain in ready reserve status, and will not be assigned any scheduled hopper dredging work other than 70 days of maintenance dredging that will be completed in conjunction with training exercises to maintain the skills of the crew, and ensure that the WHEELER remains in a fully operational state, ready to respond to any emergent dredging requirements. The Hopper Dredge WHEELER will remain at the dock, with sufficient crew to respond within 72 hours when directed by higher authority. The dredge will be placed in an active status in order to perform work in those instances when private industry fails to submit a responsive or responsible bid for advertised dredging, or where industry has failed to perform under an existing contract.

ACCOMPLISHMENTS IN PRIOR YEARS: The Hopper Dredge Wheeler has been maintained in a fully operational state and periodically performed routine dredging operations to test equipment and keep the crew trained and prepared. In every year but one, since being placed in Ready Reserve status in FY 1998, the WHEELER was called out to perform urgent dredging to assist industry dredges in restoring navigation channels and waterways. During FY 2011 while in Ready Reserve, the WHEELER completed 133 days of dredging through a combination of training exercises and multiple deployments by USACE Headquarters to perform urgent dredging on the Mississippi River, Southwest Pass. During FY 2012, the Wheeler completed 128 days of dredging through a combination of training exercises and multiple deployments by USACE Headquarters to perform urgent dredging on the Mississippi River, Southwest Pass. The vessel is being repowered at a Gulf coast shipyard during the first and second quarters of FY 2013. The Wheeler is scheduled to perform 70 days of maintenance dredging in FY 2013 that will be completed in conjunction with training exercises to maintain the skills of the crew, and ensure that the WHEELER remains in a fully operational state, ready to respond to any emergent dredging requirements. The first training exercise of FY 2013 is scheduled to begin 30 April in the Mississippi River, Southwest Pass.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Dredging Data and Lock Performance Monitoring System

AUTHORIZATION: The authority for the U.S. Army Corps of Engineers to collect data on vessel operations and cargo transiting navigation locks is contained in 33 C.F.R Part 207.800 Collection of Navigation Statistics (b)(2)(F)(3)(iv). These data are necessary to provide dredging and lock data for efficient management of Congressionally authorized navigation projects, to meet the OMB performance requirements, to supply data for analysis and modeling, as well as to respond to specific public laws, including PL 96-269 (Minimum Dredge Fleet), PL 100-656 (Small Business Set-Aside), for meeting the Government Performance and Results Act (GPRA), the Government Paperwork Elimination Act (GPEA) and Clinger-Cohen/IT Management Reform Act.

LOCATION AND DESCRIPTION: This is a national system.

CONFERENCE AMOUNT FOR FY 2013: $1,150,000 2/

BUDGETED AMOUNT FOR FY 2014: $1,150,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $1,150,000 will continue to support the Corps Navigation responsibilities and be responsive to changing data needs by maintaining the Lock and Dredging information systems and data warehouse; providing essential upgrades, security and user support; developing additional data warehouse reports to support emerging data requirements for the performance based budget; working closely with the Lock Operators Management Application (LOMA) team to develop and deploy new capabilities for the navigation information portal for Corps and industry; and work with the Inland Marine Transportation System (IMTS) to monitor performance as implementation progresses. Through the Navigation Data Integration Framework effort coordinate and share data with other navigation information databases such as Dredging Quality Management (DQM), Asset Management and Resident Management System (RMS) to reduce data redundancy and provide more robust information. Continue tracking forecasts for the world vessel fleet, commodities and trade; expand voyage ports-of-call information for containerships; and continue analyses of marine transportation system current and future channel and infrastructure requirements for coastal harbors and inland waterways. Provide dredging and lock analytical, technical, and data support for Corps HQ, division and district offices.

The dredging and lock data collection and processing programs provide baseline navigation information and analysis to support operational and strategic management decisions, is used in the budget formulation process and performance measures for the Corps navigation projects and program. This includes, lock operations on the inland waterways; the operation and maintenance of federally authorized navigation channels; performance measures to determine the quality of service and meet OMB performance measures; supports the projections of capital investments, justification and validation of future national navigation needs. Information includes Corps performed and contracted dredging (location, quantity, cost etc.); all lock activities (barges and tons of commodities, chamber unavailability, processing times, delays etc.), and physical descriptions of all the Corps owned/operated locks. The funds support the database management, operation, quality control, user assistance, training, compliance with security requirements and ACE-IT services. Both systems are the sole source of dredging and lock data/information for the Corps, Federal government and industry. These databases are transactional systems within the Corps centralized Operations and Maintenance corporate information system. They are reported under OMBIL-Plus in ITIPS and the OMB 300b submittal accounting for $611,917 of the overall OMBIL-Plus costs for FY 2014.

Technological change in the shipping industry is a continual process requiring ongoing analytical efforts to estimate the nation's future maintenance dredging needs. Update of current and future vessel characteristics, channel dimensions, commodity origins-destinations, vessel cost parameters, and other shipping data are needed to support the Corps maintenance dredging program. Tasks include tracking world trade and vessel fleet forecasts; analyses of current and projected trade patterns; assessing capability of planned and underway channel improvements to meet current and future demand, and the collection and associated analysis of dredging information and performance data in support of Civil Works navigation program decisions and budget priorities.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION:

ACCOMPLISHMENTS IN PRIOR YEARS: For this continuing program provided lock and dredging data and information critical for navigation performance measures, budget preparation and prioritization, the assessment of dredge bidding competition, national and regional trends in dredging costs and quantity, the annual small business reports for Small and Disadvantages Business Utilization (SADBU), and lock availability and performance. Integrated two separate lock data input schemes into a single data input process. Performed operations, maintenance, system upgrades, security and user support for dredging and lock data systems. Initiated and deployed a program to automatically collect real-time lock data of timing events to significantly improve data quality while providing the lock operator improved situational awareness, more flexibility in his ability to manage workload and more time to perform the primary function of safely locking vessels. Conducted in-depth review of Dredging Information System and implemented changes in response to the GAO study of benefits and effects of the Corps dredge fleet. Modified the Dredging Information System to meet a HQ requirement to track ARRA funded dredging projects and the capture of the beneficial use of dredged material. An assessment of the value of different commodities moving in domestic waterborne inland, intracoastal and Great Lakes waterborne commerce was initiated, and assistance was provided to the National Research Council's Marine Board to conduct an MTS Research & Technology Seminar. World trade and vessel fleet forecasts were updated. Technical and analytical assistance was provided on channel and navigation infrastructure needs to HQ and Corps offices.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Dredging Operations and Environmental Research (DOER) Program

AUTHORIZATION: The Clean Water Act; the Marine Protection, Research and Sanctuaries Act; and Water Resources Development Acts from1986 and following contain numerous requirements and provisions addressing contaminated sediments in navigation channels, dredged material management, and beneficial uses of dredged sediments that focus the continued need for innovation and technology development.

CONFERENCE AMT. FOR FY 2013: $6,300,000 2/

BUDGETED AMT. FOR FY 2014: $6,450,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The Dredging Operations and Environmental Research (DOER) program is the only research program in the Federal government that addresses the science, engineering, and technology needs related to dredging and managing between 200 and 300 million cubic yards of sediment that must be removed from navigation channels, ports, and harbors in the United States every year. The risks and opportunities related to 1) contaminated sediments in navigation channels and harbors, 2) optimizing dredged material management, and 3) beneficial uses of dredged sediment to restore habitat, ecosystems, and coastal recreational services mandate a continuing need for developing and applying innovative practice and technology. Contaminant detection limits are now so low that sub-trace levels of toxic substances are identified. High profile contaminants continue to plague numerous Federal and permitted dredging projects. Traditional upland disposal areas have reached or are rapidly approaching capacity with few opportunities for new facilities. Aquatic placement of dredged material, which can provide both economic and environmental benefits, must be performed in a sustainable manner that addresses and manages the risks associated with contaminant exposures, the presence of threatened and endangered species, and other uses of the water body. Innovative management practices are required to ensure that environmental standards can be achieved for dredging operations in a way that minimizes costs while maximizing sustained environmental benefits from using dredged material to accomplish habitat and ecosystem restoration and produce recreational benefits. Existing knowledge gaps in relevant physical, chemical, biological, and engineering processes lead to inefficient operations, higher management costs, and limited management and beneficial use options. Performance standards and guidance for existing and improved practices are critical needs. Risk-based assessment and management practices are needed to ensure both the economic and environmental viability of navigation dredging operations. Beneficial use/reuse of dredged material is a priority and environmental resource protection is a mandate; however, costs are increasing due to the constraints noted above. Continued economic viability and security of the Nation will depend upon our ability to remove, manage and beneficially reuse dredged material in a cost-effective and environmentally responsible manner. Continued engineering and environmental innovation will be essential to managing costs and risks.

The DOER Program is an integral and highly beneficial component of the Corps' navigation dredging and environmental protection missions. Dredging and dredged material management must be accomplished within a climate of increased dredging workload, fewer placement sites, increased environmental constraints, and decreasing fiscal and manpower resources. Balancing environmental protection, restoration opportunities and critical economic needs, while maintaining and enhancing navigation infrastructure, presents significant technical challenges. The DOER program has validated innovative technologies for managing high profile contaminants and developed risk-based assessment and management practices that will significantly reduce costs for all navigation projects, ports, and harbors. Advancing the assessment and management practices used by the U.S. Navigation Program is critical to sustaining the economic and environmental benefits produced by the USACE dredging program.

Major focus areas of DOER include: (1) sediment and dredging processes, (2) environmental resource management, (3) dredged material management, and (4) risk management.

PROPOSED ACTIVITIES FOR FY 2014:

Sediment and Dredging Processes: The SDP Focus Area will 1) demonstrate sediment budget methods for regions that include navigation channels to improve environmental assessments and increase efficiency of operations, 2) refine models for assessing contaminant and nutrient release during dredging operations, 3) develop tools to optimize beneficial use, including shallow water placement and open lake placement, 4) identify and enhance technologies to reduce channel infilling and the associated need for dredging, 5) evaluate sedimentation processes in coastal wetlands to improve wetland creation projects achieved through beneficial use of dredged sediments, 6) provide engineering guidance to support use of nautical depth in channels with fluid mud bottoms to ensure safe, reliable navigation and efficient dredging project management. Specific FY14 products include:

- Publish demonstration results for regional sediment resuspension budgets
- Publish improved model for nutrient and contaminant release
- Develop and publish new model for engineering near-shore placement of sediment for beneficial use
- Publish methods for reducing channel in-filling and dredging volumes
- Improved description of sedimentation processes in wetland environments to support beneficial use engineering
- Demonstrate and publish results of fine-scale sedimentation methods
- Publish engineering guidance for implementing nautical depth approach for U.S. Navigation Program

Environmental Resource Management: The ERM Focus Area will 1) initiate development of ecologically based design for beach nourishment with dredged sediments, 2) enhance modeling and analysis tools to define costs and alternative management practices for seasonal restrictions on dredging (i.e., environmental windows), 3) develop new technologies for detecting and managing risks to large aquatic species (e.g., marine mammals and turtles), 4) complete research and model development to reduce costs and constraints related to Interior Least Tern birds, 5) publish online database documenting Engineering With Nature projects and practices, 6) develop and publish guidance on underwater noise produced by dredging operations in relation to impacts on sensitive aquatic species and 7) document environmental and fisheries benefits from open-water placement of dredged sediments. Specific FY14 products include:

- Publish model for evaluating effects of dredging activity on population status of endangered Interior Least Terns
- Publish findings related to new technologies for managing risks for large aquatic species during dredging operations
- Publish results documenting fishery resource use of dredged material placement sites
- Publish new simulation model for predicting exposures of fish eggs and larvae to sediment suspended by dredging operations
- Publish guidance on environmental risks associated with underwater noise produced by dredging operations
- Document opportunities for new aquatic beneficial use alternatives for dredged material
- Publish online Engineering With Nature database

Dredged Material Management: The DMM Focus Area will: 1) develop data tools to expedite and improve operational design and management, 2) incorporate enhanced hydrodynamic model for improved sediment transport modeling, 3) develop tools to support placement of dredged material in nearshore and wetland conditions for the purpose of building land or enhancing habitat, 4) publish improved particle tracking model for dredging operations design, 5) develop and publish new continuous

and discrete discharge model for efficient dredged material management, 6) initiate GIS tool development for identifying beneficial use opportunities. Specific FY14 products include:

- Publish Dredging Portal system to optimize dredging operations
- Publish results demonstrating enhanced long-term fate model
- Publish results of new open water dredged material placement models for continuous and discrete flows
- Publish study results demonstrating nearshore beneficial use projects for building land or enhancing habitat
- Develop design for GIS planning tool for beneficial use projects

Risk Management: The RM Focus Area will 1) develop new risk models for environmental evaluations of dredged material, 2) publish demonstrations of decision modeling to optimize dredged material management, 3) document innovative treatment methods that can be applied to dredged material to reduce costs associated with managing contaminated sediments, 4) initiate development of next-generation toxicity tests to increase the cost-efficiency of environmental assessments of dredged material, 5) publish guidance on life cycle analysis for dredging projects to reduce long-term costs, 6) develop guidance for monitoring environmental conditions and benefits associated with sediment management. Specific FY14 products include:

- Publish new spatial bioaccumulation model for assessing risks from contaminated dredged material
- Publish case examples of decision modeling to guide efficient environmental management of dredged material
- Develop cost-effective treatment technologies for contaminated dredged material
- Publish method to apply life cycle analysis to the U.S. dredging program
- Publish descriptions of new toxicity testing methods for dredged material
- Design requirements for environmental monitoring metrics

LNG Demonstration: Convert an existing floating plant to run on LNG to demonstrate the viability and measure the reduction in emissions. The intent is to determine the feasibility and costs of the conversion and operations.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	$6,870,000	
Allocation for FY12	$6,114,000	
Conference Allowance for FY13	$6,300,000	2/
Estimated Carry-In Funds	$0	
President's Budget for FY14	$6,450,000	1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Dredging Operations Technical Support (DOTS) Program

AUTHORIZATION: Authorization for the Corps of Engineers Engineer Research and Development Center (ERDC) to conduct R&D is codified in 10 U.S.C. 2358 ("The Secretary of Defense or the Secretary of a military department may engage in basic research, applied research, advanced research, and development projects that are necessary to the responsibilities of such Secretary's department in the field of research and development.")

CONFERENCE AMT. FOR FY 2013: $2,820,000 2/

BUDGETED AMT. FOR FY 2014: $2,820,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

Maintenance of the nation's navigation infrastructure requires compliance with numerous complex environmental statutes and Presidential Executive Orders. The Dredging Operations Technical Support (DOTS) Program fosters a "one-door-to-the-Corps" clearinghouse for access to comprehensive information on technology related to navigation O&M functions, including technology demonstrations and training essential to all stakeholders involved in Federal and permitted navigation projects. DOTS is structured as a centralized source for technology transfer that maximizes cost effectiveness and facilitates expeditious and consistent implementation of national policies and laws based on complex technical requirements. The DOTS Program fosters application of state-of-the-art technologies and ongoing research results for high priority problems identified by field offices. Emerging environmental concerns often cause uncertainty and unanticipated difficulties in the administration of the Corps' navigation dredging program. The DOTS program's technology transfer function provides access to an extensive, up-to-date, consistent technology base whereby timely, proactive responses to technical issues can be made as they emerge. This approach promotes networking and solutions to common problems confronting the navigation dredging community. DOTS supports knowledge-based exchange of information throughout the interagency coordination process. Short-term work efforts to address generic Corps-wide technical problems encountered during maintenance of navigable waterways and infrastructure are major features of the DOTS Program. Technology transfer and demonstration of new techniques with potentially high returns on investment for management of Corps navigation maintenance projects are critical DOTS functions. By disseminating technically sound knowledge to field offices constrained by staff reductions and limited resources, the DOTS Program will continue to perform a critical technology transfer role in support of all O&M navigation projects. DOTS fosters productive, collaborative relationships with other federal and state agencies with missions relevant to navigation, particularly the US Environmental Protection Agency, and academic institutions, including the National Academy of Sciences.

<u>PROPOSED ACTIVITIES FOR FY 2014</u>:

- The Dredging Innovations Group (DIG) within DOTS will continue to provide tools and support to Districts, Divisions, and Headquarters to optimize overall navigation system performance. Continued optimization of the National dredging program requires improved tools, methodologies, and practices to formulate the most efficient and nationally coordinated program. This effort supports a dredging innovation group to bring ERDC, District, and industry expertise together and create new capabilities, tools, and methodologies supporting national planning and implementation. For example, this effort contributes to further development and implementation of Dredging Quality Management technologies, which provides real time dredging process data to Districts, fostering efficient operations. The DIG also supports dredging project scheduling optimization with software tools capable of performing sensitivity analyses to obtain cost savings.

The DIG also develops enhanced risk assessment tools for quantifying uncertainties associated with dredging processes.

- Expand support for technical responses to field offices encountering problematic navigation issues. Whereas DOTS has historically concentrated on dredging and dredged material placement, the program's resources have been increasingly requested by personnel engaged in many other navigation-relevant activities (e.g., safe inland navigation lock operations, coastal inlet sedimentation issues, navigation structure performance, etc.). Increasing demand for rapid technical advice continues to be constrained by available funding.

- Continue critical support of ongoing efforts to resolve expensive, controversial conflicts between navigation O&M activities and protection of Threatened and Endangered Species through effective interagency coordination and collaboration with credible, independent third parties. One example is sponsoring the American Bird Conservancy to mediate and determine most effective recovery strategies for the endangered Interior Least Tern. Separately, ongoing engagement with multiple agencies seeking improved management practices for protection of endangered sea turtles yielded progress toward more flexible environmental windows and potentially substantial cost savings across multiple NAD, SAD, MVD, and SWD Districts. These efforts, which have high probabilities of long-term substantive cost savings to the O&M budget, require expanded short-term investments. Likewise, emerging issues related to protection of species proposed for federal listing (e.g., Atlantic sturgeon) are best addressed through proactive exchange of knowledge pertaining to dredging and other navigation O&M processes in order that informed decisions be integrated into mandated protection measures upon listing.

- DOTS continues to support standardized reporting to the US Fish and Wildlife Service of Endangered Species Act compliance costs affecting O&M navigation projects as mandated by Congress. Prior to implementation of the DOTS-sponsored system, costs were estimated using arbitrary methods.

- Continue coordination with the Transportation Research Board of the National Academy of Sciences with regard to navigation-relevant issues.

- Expand support of mandated reporting to other Federal and international agencies with regard to dredged material placement in oceanic waters and costs of compliance for navigation projects with the Endangered Species Act. DOTS developed standardized, faster, accessible, and accurate web-based tools for satisfying these requirements. Ongoing efforts will refine these tools for expedited use by field office users.

- Expand investment in training of Corps and regulatory agency staff in dredging and other navigation mission processes. Existing training materials that have become outdated need to be revised. New opportunities for regional training exercises will be sought. Training of newly recruited Corps and regulatory agency personnel show significant payback in the form of conflict avoidance and project execution delays stemming from unfamiliarity with basic dredging processes and misperceptions. Education of personnel engaged in navigation project planning, implementation, operation, and maintenance is a critical limitation as demographics in the regulatory agencies change through pulses of retirement and recruitment.

- Continue expansion of web-based tools and access to existing knowledge pertaining to the broad navigation mission. This activity was given a major emphasis in order to keep pace with rapid advances in information sharing technologies and growing dependence on internet resources.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	$1,963,000	
Allocation for FY12	$2,736,000	
Conference Allowance for FY13	$2,820,000	
Allocations through FY13	$2,820,000	2/
Estimated Carry-In Funds	$0	
President's Budget for FY14	$2,820,000	1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Earthquake Hazards Reduction Program.

AUTHORIZATION: This program is being conducted under the authority of PL 101-614, November 1990, National Earthquake Hazards Reduction Program Re-Authorization Act.

LOCATION AND DESCRIPTION: Nationwide Program. The purpose of this program is to respond to the requirements of PL 101-614, National Earthquake Hazards Reduction Program (NEHRP) and Executive Order 12941, Seismic Safety of Existing Federal Buildings. This Executive Order directs all Federal departments and agencies to develop an inventory of their owned and leased buildings and to estimate of the cost of mitigating unacceptable seismic risks in their buildings. The objective of PL 101-614 is to establish and initiate, for buildings and lifelines, a systematic approach designed to reduce the loss of life, reduce injuries and to reduce the economic costs resulting from earthquakes occurring in the United States. Lifelines are defined as public works systems and utility systems.

CONFERENCE AMOUNT FOR FY 2013: $ 270,000 2/
BUDGETED AMOUNT FOR FY 2014: $ 270,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: Continued development and refinement of the SSAC or Seismic Safety Action Classification System. This program provides evaluation and mitigation procedures for seismically deficient buildings while ranking them in order of greatest risk. This program will meet the executive order requirements and the legal concerns, while continuing to develop technical seismic building evaluation and mitigation procedures. USACE has a legal opinion that indicates that once we have identified seismically vulnerable structures we are legally responsible to develop a plan to mitigate these vulnerabilities. As part of this program, seismic evaluation personnel will be identified and appropriately trained. Continue to develop and refine guidance on the seismic evaluation and risk mitigation procedures of lifeline facilities, this includes publishing material such as EM 6057, Seismic Lifeline Evaluation for Hydropower Components. Continue to provide assistance to Districts and Divisions in the development of mitigation concepts and designs and to provide required support to HQUSACE. In addition, funds from this program helps to maintain technical seismic expertise, develop guidance for additional lifeline systems not previously covered in commercially available standards or existing USACE guidance, and to develop guidance for operations personnel. This program will also continue to fund the publication of new criteria and the updating of existing seismic criteria. Example publications are ER 1806 and ER 8161,' Earthquake Design and Evaluation of Civil Works Projects' and 'Seismic Design of Civil Works Buildings'.

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Over 12,000 owned buildings and powerhouses have been inventoried. Seismic screenings of over 700 buildings in all seismic regions have been accomplished. Seismic

evaluations have been performed on over 200 buildings and powerhouses in various geographic regions, primarily in high and moderate seismic regions. Reports have been developed for FEMA to be forwarded to Congress on buildings and powerhouses. Criteria has been developed and published for the evaluation and mitigation of buildings and lifelines. In addition, building evaluation criteria, powerhouse evaluation criteria and lifeline criteria for intake towers, navigation locks, and powerhouses have all been developed. Seismic evaluation and mitigation seminars have been conducted for District and Division personnel. Technical support has been provided to the districts and divisions in accomplishing evaluations. Over 30 rehabilitation case studies and over 25 rehabilitation cost estimate studies for structural or nonstructural powerhouse deficiencies have also been accomplished.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

PROJECT NAME: Facility Protection

AUTHORIZATION: The Energy and Water Development Appropriations Act, 2002 (PL 107-66), Consolidated Appropriations Resolution 2003 (PL 108-7), Energy and Water Development Appropriations Act 2004 (PL 108-137), Consolidated Appropriations Resolution 2005 (PL 108-447), Energy and Water Development Appropriations Act 2006 (PL 109-103).

CONFERENCE AMOUNT FOR FY 2013: $5,500,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $5,500,000 O: $0 T: $5,500,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014: The requested funding will support the following FY 2014 activities to be executed through the U.S. Army Corps of Engineers (USACE) Critical Infrastructure Protection & Resilience (CIPR) Program: USACE's 2014 implementation of a Consequence-Based Top Screening (CTS) methodology for systematic screening and consistent prioritization of high-consequence (critical) dams and navigation locks; implementation of regional resilience efforts supporting the development of integrated regional strategies incorporating public and private stakeholders within a region to help identify, analyze, assess, and enhance regional preparedness and disaster resilience using multi-jurisdictional discussion-based activities; development of consequence analysis studies and system-based interdependency assessments at Corps civil works critical projects through USACE's Modeling, Mapping, and Consequence Estimation Production Center of Expertise; development of advanced modeling and simulation studies for critical infrastructure, and; collaborate in the implementation of a systematic approach and risk-mitigation strategy for evaluation and comparison of security risks across USACE's critical infrastructure portfolio (e.g. Common Risk Model for Dams) and identify requirements for risk mitigation to manmade threats. In addition, it will also support additional requirements associated with a surge in security risk reduction measures at USACE critical projects due to increased threat levels.

The USACE CIPR program goal is to achieve a more secure and more resilient civil works critical infrastructure by enhancing its protection in order to prevent, deter, or mitigate the effects of manmade incidents and improve preparedness, response, and rapid recovery in the event of an attack, natural disaster, and other emergencies. The CIPR program supports the National Infrastructure Protection Plan and the National Response Framework, and it is directly aligned with the Dams Sector-Specific Plan. The objectives of the CIPR program include assessing and prioritizing Corps civil works critical infrastructure by implementing a portfolio-wide risk assessment framework. The CIPR program focus is not necessarily facility specific, as it addresses portfolio-wide resilience-enhancing efforts. This holistic, integrated framework is facilitated through the implementation of system-wide and asset-specific integrated actions for enhanced protection and resilience at USACE critical infrastructure facilities. The goals of the CIPR program are to develop, implement and sustain an integrated risk-based assessment & management framework for Corps civil works critical infrastructure; to assess and prioritize Corps civil works critical infrastructure by developing and implementing a portfolio-wide risk assessment approach; and, to improve the risk profile of Corps civil works critical infrastructure. These goals will be attained by developing solutions, methodologies, and tools to address key vulnerabilities to manmade incidents, implementing effective programs to minimize consequences, improving the response and recovery capabilities using an all-hazards approach, and prioritizing life-cycle investments.

FRM: $5,500,000

OTHER INFORMATION: In FY 2013, the USACE CIPR program implemented the 2013 Consequence-Based Top Screening (CTS) methodology screening and prioritization efforts at USACE projects whose potential failure, damage, or disruption could lead to the most significant consequences at the national/regional level (critical impacts to the Nation's public health and safety, economic, and/or national security). The CTS methodology represents a consistent sector-wide process to identify and characterize high-consequence facilities, and provides the initial step of the security risk assessment and management framework implemented by USACE. Additional accomplishments in FY 2013 include: collaborated in the development of web-based capabilities (Dams Sector Analysis Tool) consolidating analysis tools and data collection mechanisms supporting the screening, prioritization, and characterization of critical assets; provided oversight and support to the development consequence analysis and system-based interdependency assessment of Civil Works projects supporting critical infrastructure screening efforts; supported MSCs in the implementation of a systematic approach for security risk assessment (e.g. Common Risk Model for Dams risk assessments at USACE critical projects; developed targeted summaries (Comprehensive Facility Reports) of key information on selected dams and locks of regional or national significance to facilitate quick regional impact assessment reporting for natural hazards and manmade incidents; conducted blast damage assessment pilot studies using ATPlanner-Dams at selected number of critical projects; continued improvement of simplified blast damage assessment tools (ATPlanner-Dams) of water-backed embankment dams from explosive loading using data from full-scale and reduce-scale experiments; conducted small- and large-scale experiments using embankment, concrete dams and navigation lock models to evaluate blast-induce damage under crest- and water-side attack scenario, and; continued interagency collaboration with the DHS designated Dams Sector-Specific Agency and other Dams Sector stakeholders on the coordination and implementation of critical infrastructure protection and resilience initiatives. In addition, funding supported additional requirements associated with a surge in security risk reduction measures at USACE critical projects due to increased threat levels.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $1,000,000. This carry-over amount is a reserve to be used to fund unexpected emergency requirements associated with a surge in security risk reduction measures at USACE critical projects due to increased threat levels.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

FERC Hydropower Coordination

SUMMARIZED FINANCIAL DATA:

President's Budget for FY 2013	$ 3,000,000	2/
Budget for FY 2014	$ 3,000,000	1/
Change in FY 2014 from FY 2013	$ 0	

BACKGROUND: The Corps Engineering Regulation 1110-2-1454 states in part, "When a non-Federal hydropower plant is licensed by the Federal Energy Regulatory Commission (FERC) for construction at a Corps project, the licensee will be required to reimburse the Corps directly for all reasonable costs associated with the Corps review and approval of the final design, construction, plans, specifications, and inspection of the construction." As a consequence of this guidance, the Corps has been collecting and expending funds for many years for these activities from FERC licensees who have built, owned and operated hydropower facilities at Corps projects. However, in June 2006, the Office of Counsel, HQUSACE, advised that the Federal Power Act, as amended, does not provide the necessary authority for the Corps to expend funds received directly from FERC licensees. The Office of Counsel went on to say that the Corps must instead, deposit the funds in the Treasury's Miscellaneous Receipts account and must rely on annual appropriations to carry out its responsibilities under the Federal Power Act.

JUSTIFICATION: The Office of Counsel, HQUSACE, determination in June 2006, that the Corps did not have the legal authority to expend funds received directly from FERC licensees, has resulted in the Corps relying on the annual budget process and annual Congressional appropriations for the funds necessary to carry out its responsibilities under the Federal Power Act.

PROPOSED ACTIVITY FOR FY 2014: FY2014 funding will continue coordination activities with FERC permit holders and licensees in Corps districts. These coordination activities will provide support to FERC permit holders and licensees to ensure that all Corps statutory requirements are met and that there will be no infringement upon the Corps' authorized purposes by the proposed non-Federal development.

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Fish & Wildlife Operating Fish Hatchery Mitigation

AUTHORIZATION: Public Law 111-85

LOCATION AND DESCRIPTION: This is a recurring national program. In 2008, Congress authorized the U.S. Fish and Wildlife Service (USFWS) to seek reimbursement from the Corps of Engineers for O&M costs incurred by the National Fish Hatchery System for mitigation of certain Corps dam projects which typically predated the National Environmental Policy Act. Subsequent congressional direction as well as concurrence by OMB and ASACW has resulted in a specific line item authorization in the Corps FY10-14 budgets to meet the Corps mitigation requirements.

CONFERENCE AMOUNT FOR FY 2013: $4,300,000 2/

BUDGETED AMOUNT FOR FY 2014: $4,700,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

EN: $4,700,000 The 2014 funding will be transferred to the USFWS for National Fish Hatchery (NFH) for their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams. This amount meets the 100 percent of Corps fish mitigation as determined by 2008 Fish and Wildlife Service estimate.

PREVIOUS YEAR ACCOMPLISHMENTS:

FY 2012: $3,800,000 to be transferred to the USFWS for National Fish Hatchery (NFH) toward their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams.

FY 2013: $3,800,000 transferred to the USFWS for National Fish Hatchery (NFH) toward their costs to produce and release approximately 12 million mitigation fish at 45 different receiving waters impacted by 37 Corps dams.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2013 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Great Lakes Tributary Model, IL, IN, MI, MN, NY, OH, PA, WI

AUTHORIZATION: Section 516(e), Water Resources Development Act of 1996, as amended by Section 334, WRDA of 2000 and Section 5013, WRDA of 2007

CONFERENCE AMT. FOR FY 2013: $1,080,000 2/

BUDGETED AMT. FOR FY 2014: $600,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

There are 137 Federal navigation projects within the Great Lakes, including deep-draft commercial harbors and shallow-draft harbors. Sedimentation within these navigation channels requires periodic dredging and the amounts of sediments to be dredged and the levels of pollutants in these sediments are determined by decisions made throughout the watersheds that drain into these navigation channels. Under this authority, the USACE is developing sediment transport models for tributaries to the Great Lakes that discharge to Federal navigation channels or Areas of Concern (AOCs). These models and related tools are being developed to assist state and local resource agencies evaluating alternatives for soil conservation and nonpoint source pollution prevention in the tributary watersheds. The ultimate goal is to provide tools that support state and local measures to reduce the loading of sediments and pollutants to navigation channels and AOCs, and thereby reduce the costs for navigation maintenance and sediment remediation.

This program is being implemented in coordination with several other Federal agencies, the eight Great Lakes states, and over 200 soil and water conservation districts in the Great Lakes watershed. This program has developed models and related watershed planning tools for over 25 tributaries that discharge to Federal navigation channels. Models are being utilized by state and local governments to support prioritization of soil conservation practices and non-point pollution actions that will reduce loadings sediments and levels of contaminants in Great Lakes harbors. This program directly supports the objectives of the Administration's Great Lakes Restoration Initiative as well as the recommendations of the Interagency Ocean Policy Task Force.

PROPOSED ACTIVITIES FOR FY 2014:

- $1,080,000 will be used to continue or complete development of models at the following tributaries (Calumet River, IL; Black Creek, NY; Oatka Creek, NY; Upper Blanchard River, OH; River Raisin, MI; Fox River, WI; Upper East River, WI) and continue the enhancement and utilization of Internet-based modeling tools by local agencies and stakeholders for sub-watershed evaluations. Districts will provide technical support and training to state and local partners that are using models developed under this program to reduce loadings of sediments and contaminants to Great Lakes tributaries, thereby reducing future dredging requirements at Federal navigation channels and promoting the restoration of beneficial uses at Great Lakes Areas of Concern.

- Additional funding of $420,000 could be used to expedite the completion of models at selected tributaries and conduct additional training for state and local land management agencies on these and other tools to enhance soil conservation and nonpoint source pollution prevention.

ACCOMPLISHMENTS IN FY 2013

- FY 2013 funds are being used to continue or complete development of models at the following tributaries (Calumet River, IL; Oatka Creek, NY; Canaseraga Creek, NY; Tiffin River, OH; Upper Blanchard River, OH; Jordan River, MI; Swartz Creek, MI; River Raisin, MI; Fox River, WI; Upper East River, WI) and continue enhancement and utilization of Internet-based modeling tools by local agencies and stakeholders for sub-watershed evaluations. Districts are providing technical

support and training to state and local partners that are using models developed under this program to reduce loadings of sediments and contaminants to Great Lakes tributaries, thereby reducing future dredging requirements at Federal navigation channels and promoting the restoration of beneficial uses at Great Lakes Areas of Concern.

- Models and related watershed planning tools have already been completed for over 25 tributaries to Federal navigation channels and Areas of Concern in the Great Lakes (Waukegan River, IL; Grand Calumet River, IN; Trail Creek, IN; Burns Waterway, IN; Battle Creek, MI; Saginaw River, MI; St. Joseph River, MI; Clinton River, MI; Grand River, MI; Rouge River, MI; Nemadji River, MN/WI; Knowlton Creek, MN; Buffalo River, NY; Cayuga Creek, NY; Eighteenmile Creek, NY; Genesee River, NY; Niagara River, NY; Cattaraugus Creek, NY; Oak Orchard, NY; Grand River, OH; Upper Auglaize River, OH; Blanchard River, OH; Black River, OH; Cuyahoga River, OH; Mill and Cascade Creeks, PA; Manitowoc River, WI; Menomonee River, WI; Siskiwit River, WI; Whittlesey Creek, WI). In addition, Internet based tools have been developed in cooperation with Michigan State University, Purdue University, and the U.S. Forest Service to support decision making on: agricultural and forestry practices; development of Total Maximum Daily Loads (TMDLs) for nonpoint source pollution control; prioritization of conservation practices; management of urban development, and; design of stream restoration projects.

- This program continues to enhance the capabilities of state and local governments to manage programs that reduce the loading of sediments and levels of contaminants in tributaries to the Great Lakes. Many of the models and tools and all of the experience gained from this program are transferrable to other watersheds outside the Great Lakes.

SUMMARIZED FINANCIAL DATA:

Allocation for FY2011	$ 1,200,000
Allocation for FY2012	$ 1,048,410
Conference Allowance for FY2013	$ 1,080,000 2/
Allocations through FY2013 2/	$12,957,780
Estimated Carry-In Funds	$ 0
President's Budget for FY2014	$ 600,000 1/

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2013 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Inland Waterway Navigational Charts

AUTHORIZATION: PL 85-480, approved 2 July 1958, authorizes the Commander, US Army Corps of Engineers (Corps) to publish information pamphlets, maps, brochures, and other material on river and harbor, flood control, and other civil works activities, including related public park and recreation facilities that may be of value to the general public.

LOCATION AND DESCRIPTION: Nationwide Remaining Item -- The U.S. inland navigation system consists of 8,200 miles of rivers maintained by the US Army Corps of Engineers in 22 states and includes 276 lock chambers with a total lift of 6,100 feet. The highly adaptable and effective system of barge navigation moves over 625 million tons of commodities annually, which includes coal, petroleum products, various other raw materials, food and farm products, chemicals, and manufactured goods. The shallow draft waterways have many unique characteristics which make it difficult to navigate. Challenges in these confined waterways include river levels that change by over 30 feet in a seasonal cycle, navigation channels that shift significantly within the river banks, and shifting river currents. Electronic chart systems offer significant benefits to vessels by providing accurate and real-time display of vessel position relative to waterway features. This information can be used for voyage planning and monitoring, training tools for new personnel, and integrated display in river charts, radar, and Automatic Identification Systems.

Following recommendations by the National Transportation Safety Board, the National Academy of Science and the American Waterways Operators, Congress directed the Corps of Engineers to develop and publish electronic charts for the inland waterways. Development of IENCs to cover the Mississippi River and tributaries began in 2001 with pilot projects on the Atchafalaya River in Louisiana and Lower Mississippi River near Vicksburg, Mississippi. These projects, which involved a combination of in-house and contract activities, were the first efforts to collect and convert inland waterway data, commonly used for river and channel maintenance, into the international S-57 hydrographic data exchange. This highly structured data format is commonly used for electronic chart applications and being used in IENC.

CONFERENCE AMOUNT FOR FY 2013: $3,420,000 [1]

BUDGETED AMOUNT FOR FY 2014: M: $0 O: $3,000,000

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

FRM: This effort provides Corps' Electronic Navigational Chart (ENC) data for all inland waterways and other federal navigation channels maintained by the Corps to be used by commercial Electronic Chart Systems (ECS), which, when combined with the existing Differential Global Positioning System (DGPS), will improve the safety and efficiency of marine navigation in both inland and coastal waterways of the United States. (www.agc.army.mil/echarts) On inland waterways, the Corps will collect more accurate survey and mapping data than is currently on its paper charts, and produce Inland Electronic Navigation Charts (IENCs) in accordance with navigation users and ECS vendors. When combined in the commercial ECS, the technology will greatly improve the safety and efficiency of navigation. This will allow safe navigation through bridge openings during fog and other bad weather conditions as well as during heavy traffic situations, and provide an accurate display for other systems such as radar and

[1] At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Automatic Identification Systems. The Corps will use the S-57 international data format, the electronic data transfer standard prepared by the International Hydrographic Organization committee. The S-57 format is consistent with electronic chart products produced by the National Oceanic and Atmospheric Administration (NOAA) and foreign countries and the chart products produced by the two agencies will be coordinated for compatibility in adjoining areas. The Corps will also coordinate with the U.S. Coast Guard for aids to navigation information and collaboration on rules for chart carriage by waterway users. In coastal and Great Lakes areas, the Corps will produce standardized channel condition chart products that will provide consistent and reliable information to NOAA for chart updates, in accordance with Water Resources Development Act of 2000, Section 558. Similar channel chart products will be provided to navigation users, and these coastal and Great Lakes channel condition chart products will also follow the S-57 format. Such ENC development and publication activities are in accordance with National Transportation Safety Board recommendations to the Corps, and subsequent commitments made by the Chief of Engineers. All IENC data is available on CorpsMap in addition to the web site (see link above).

PROPOSED ACTIVITIES FOR FY 2014: Update features for all existing IENCs. Continue to maintain all 106 IENCs in Inland ENC standard (over 7,400 miles). Continue chart error reporting development from public; development of IENCs for dynamic navigation areas; completion of location of bridges and bridge piers using Lidar technology; completion of bridge clearances in coordination with US Coast Guard; further enhancements of charts by adding attribution to features such as lights and daymarks; complete channel condition reports procedure for NOAA charts, investigate addition of new features and technology including AIS test bed for IENC data.

ACCOMPLISHMENTS IN FY 2013: Updated features for the Allegheny, Arkansas, Atchafalaya, Black Warrior-Tombigbee, Cumberland, Green, Illinois, Kanawha, Mississippi, Missouri, Mobile, Monongahela, Ohio, Red and Tennessee Rivers – over 6,200 miles. Completed conversion of all 106 IENC cells from S-57 product specification to Inland ENC product specification. Contributed to low water and rock pinnacles analysis at Thebes, Illinois area of Mississippi River by providing interpretation and buoy locations. Continued chart production will include Alabama – 304 miles and White 300 miles and will be produced to the Inland ENC standard. Completed channel framework of coastal and Great Lakes areas; established standard for paper charts; continued data reporting and compilation process with U.S. Power Squadron, showcased chart development and production at several national and international meetings. Develop web mapping service for downloading charts from mobile devices. Refine ESRI Nautical Solution for paper and electronic chart production. Participate in Amazon Web Services pilot project for distribution of data on the “cloud”. Continue USCG buoy program for inclusion on charts. Completed Inland Electronic Navigational Chart manual (EM 1110-2-6055).

FRM: $0

N: $3,000

RC: $0

H: $0

EN: $0

WS: $0

OTHER INFORMATION: This project is a Corps-wide Inland Electronic Navigational Chart program managed by the Army Geospatial Center with data contributions from 15 inland districts and the US Coast Guard.

O&M Justification Sheet

PROJECT NAME: Inspection of Completed Federal Flood Control Projects, Remaining Item

AUTHORIZATION: Section 221 of the Flood Control Act of 1970, as amended (84 Stat. 1831, 42 U.S.C. l962d-5b), requires that a written agreement be executed between the Secretary of the Army and the non-federal sponsor to identify the "items of local cooperation" for US Army Corps of Engineers (USACE) projects, including operation and maintenance requirements. It also authorizes USACE to "undertake performance of those items of cooperation necessary to the functioning of the project for its purposes, if USACE has first notified the non-federal interest of its failure to perform the terms of its agreement and has given such interest a reasonable time after such notification to so perform." To determine whether the non-federal sponsor is performing as it has agreed, USACE undertakes inspections of completed projects. Engineer Regulation 500-1-1, Emergency Employment of Army and Other Resources, Civil Emergency Management Program, Chapter 5, Rehabilitation and Inspection Program in conjunction with related policies for the USACE Levee and Dam Safety Programs establishes the policy for the inspection of federal flood risk management projects which have non-federal sponsors responsible for operation, maintenance, repair, replacement, and rehabilitation as specified in formal agreements based on Section 221 of the Flood Control Act of 1970 or other legislation. More recently, Section 100226 of the Moving Ahead for Progress in the 21st Century Act (MAP-21) enacted on July 6, 2012, calls for USACE and the Federal Emergency Management Agency (FEMA) to establish a task force to develop recommendations that improves alignment between the two agencies, specifically identifying data collected by USACE under the Inspection of Completed Works (ICW) Program.

LOCATION AND DESCRIPTION: Due to potential life safety consequences, federally authorized levee systems are the priority for this program. The reservoirs that are USACE constructed and operated by others are typically inspected under each individual state dam safety programs. The number of miles of federally authorized/locally operated and maintained levees within the USACE Levee Safety Program is approximately 11,750 miles with a total population at risk of over 10 million people. Channel projects associated with levee systems are also included under the Levee Safety Program. Many of these projects are adjacent to highly urbanized areas, and all of them require continued maintenance after construction in order to ensure the project will function as intended, as well as, preserve the value of the federal investment. This work represents part of the USACE Levee Safety Program Initiative, a strategic plan to complete the initial collection of baseline information on levees within a USACE authority, including screening level risk assessments and periodic inspections, within three years. This is the second year. At the end of the third year, funding for this remaining item will be adjusted to reflect amount needed to manage the ICW Program.

CONFERENCE AMOUNT FOR FY 2013: $30,603,000 2/

BUDGETED AMOUNT FOR FY 2014: T: $30,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014: The USACE Levee Safety Program has the mission to work with stakeholders to assess, communicate, reduce and then manage the risks to people, the economy, and the environment associated with the presence of levee systems. With this in mind, the basic objectives of the USACE Levee Safety Program are (1) to develop balanced and informed assessments of levees; (2) to evaluate, prioritize and justify levee safety decisions, and (3) to make recommendations to improve life safety associated with levee systems. One of the main activities includes inspections of federally authorized projects operated and maintained by a non-federal sponsor. The purpose of the inspections is to determine if the levee system will perform as expected; identify deficiencies or areas which need monitoring or immediate repair; identify any changes over time; and collect information in order to be able to make informed decisions about future actions. Inspection and inventory information serve as the foundational elements of the Levee Safety Program, because the information collected allows for implementation of other activities including screening levees to rank them in order of risk; conducting initial risk assessments in order to answer key questions regarding priorities, urgency of action, and type of action; and coordinating Levee Safety Program efforts with stakeholders and other agencies to build the foundation for shared responsibility to develop risk reduction measures.

Division: HQUSACE District: HQUSACE ICW, Remaining Item

N: $0

FRM: $30,000,000. USACE will continue partnering activities including public release of screening level risk assessment results, advising on interim risk reduction measures, and coordinating with other agencies on developing policies. Also, the Corps will continue close coordination and collaboration of policies with FEMA and other federal agencies on the National Levee Database and their complementary federal programs, such as the RiskMAP program. USACE intends to finalize the Levee Safety Program comprehensive guidance document containing details on implementing each activity in the portfolio risk management process. USACE will move forward on recommendations by the task force as required by Section 100226 of MAP-21. USACE will complete an additional 300 levee risk screenings and 125 periodic inspections.

RC: $0

H: $0

EN: $0

WS: $0

OTHER INFORMATION: This project (remaining item) is an agency-wide project that is directed by HQUSACE. Note that districts will continue to budget individually for routine ICW activities.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Monitoring Completed Navigation Projects (MCNP)

AUTHORIZATION: Authorization for the Corps of Engineers Engineer Research and Development Center (ERDC) to conduct R&D is codified in 10 U.S.C. 2358 ("The Secretary of Defense or the Secretary of a military department may engage in basic research, applied research, advanced research, and development projects that are necessary to the responsibilities of such Secretary's department in the filed of research and development.")

CONFERENCE AMT. FOR FY 2013: $3,920,000 2/

BUDGETED AMT. FOR FY 2014: $6,920,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

These monitoring efforts, governed by Engineer Regulation 1110-2-8151 (Monitoring Completed Navigation Projects)**,** are essential for providing data for efficient and effective management of critically important Federal shallow- and deep-draft navigation projects and infrastructure for both national economic and military sealift security reasons. The Corps operates and maintains more than 1,000 navigation projects encompassing more than 25,000 miles of waterways. The Corps requires a national program to identify the best navigation project practices, and to use them to improve all other navigation projects' performance. Optimizing Civil Works navigation infrastructure performance requires that they be monitored upon completion, evaluated against preconstruction and present needs, and lessons learned translated into proactive operations management and design guidance for Corps Districts. Information gained from the MCNP program, including changes in sediment transport, water levels, currents, waves, flushing, river flows, ice, structure deterioration, and other coastal and river hydraulic phenomena with associated marine transportation and environmental impacts, will be used to verify design expectations, determine benefits, and identify operational and maintenance efficiencies. Information collected will significantly improve projects' performance, and optimize opportunities for marine transportation and environmental enhancement. The MCNP program collects valuable navigation data, documents successful designs, disseminates data and lessons learned on projects with problems, and provides upgraded field guidance for solutions that will reduce life-cycle costs on a national scale.

The MCNP program includes development of a real time monitoring capability of the navigation system through River Information Services, to improve inland navigation reliability and address the Administration High Priority Performance Goal for USACE Navigation which calls for decreasing unscheduled navigation lock closures on the inland waterway. Additionally, MCNP enhances research and development specific to Navigation Structures, to link the knowledge gained through navigation project monitoring with emerging technology, materials, and monitoring tools to reduce unscheduled repairs and increase system efficiency and reliability. No other programs in the USACE or Federal sector address these critical requirements.

Shallow- and deep-draft navigation projects located in ports, harbors, rivers, reservoirs, lakes, estuaries, and in the coastal zone are included in this program. Projects that provide maximum cost savings are identified, and those that best address high-priority life-cycle O&M project cost savings are selected for monitoring and evaluation. The Corps districts and the Engineer Research and Development Center develop monitoring plans jointly.

Coordination between the Corps and other Federal, state, and local agencies and with industry is essential for proper accomplishment of this program. In addition to satisfying Corps' requirements, the data are made available through publications and electronic technology transfer, and will be of great value to local, State, and other Federal agencies with navigation management policies. Results are communicated immediately to other member agencies of the Marine Transportation System (MTS).

PROPOSED ACTIVITIES FOR FY 2014:

Periodic Inspection of Navigation Structures ($.48M)

- Ground-based vertical and horizontal movement of stone and concrete breakwater and jetty armor units will be conducted of selected high-priority navigation structures with great commercial importance using both existing and new technologies, for direct comparison to previous aerial LIDAR and photogrammetric data collection.
- Newly developing technologies using computerized analyses will be proof-tested for making highly accurate quantitative profile measurements with high-quality digital photography and video.
- Ground-based LIDAR centimeter-accuracy will be used to produce overlapping data subsets of high-priority deep-draft navigation structures for Operational Condition Assessment (OCA) of USACE Asset Management.

Marmet Locks and Dam: lock guide walls, approaches, filling system, and control valves ($.48M)

- All field prototype data pertaining to (a) time-lapse videos and forces of down-bound tows impacting upstream guide wall, (b) upper and lower lock approaches to predict rate of erosion and deposition, (c) inspection of lock filling system intake, culverts, discharge outlet, and Stoney Gate valves to determine concrete deterioration and/or valve cavitation damage, and (d) LOCKSIM evaluation of lock performance will be finalized, and an ERDC Technical Report will be published. Study will be completed at end of FY14.

Gulfport Ship Channel, MS: fluid mud and nautical depth ($.48M)

- After USACE ERDC ship simulator validation, Gulfport pilots will conduct runs under various operating conditions (e.g., varying under-keel clearance, different ship hulls and propulsion parameters, different fluid mud characteristics, etc.), and will rate respective degree of difficulty (acceptable, marginal, unacceptable). (Acceptance of nautical depth criteria by the pilots is fundamental because navigation safety is critical in successful implementation.)
- Guidance documentation on use of nautical depth criteria, methodologies, and tools will be made available for implementation of nautical depth in the Gulfport ship channel as well as establishing core components of a paradigm for implementing nautical depth on a USACE-wide basis.

John T. Myers Locks & Dam Trunnion Rods: breakage of rods inside dam concrete piers ($.48M)

- Field verification of trunnion rod monitoring system at John T. Myers L&D will continue. Refinements to monitoring system will be performed in preparation for permanent installation at John T. Myers L&D.
- Workshop will be held at John T. Myers L&D to demonstrate monitoring system to other Corps offices, and to solicit input for permanent system.
- Specifications for permanent anchor trunnion rod tension assessment monitoring system will be developed for Corps District offices.
- ERDC and Louisville District personnel will initiate development of a concept trunnion rod repair or replacement design.

River Information Services (RIS): enhancing inland waterway and traffic info to users ($1M)

- Will continue development of real-time monitoring capability of navigation system through RIS to improve inland navigation reliability and address the Administration High Priority Performance Goal for USACE Navigation, which calls for decreasing unscheduled navigation lock closures on the waterways.
- Will expand partnership with other inland navigation industry partners and government agencies.
- Will develop additional RIS for delivery as web services and other means (e.g., wireless waterway networks).

Innovative Techniques for Navigation Lock Operations and Extending Useful Service Life ($.25M)

- Conduct testing of emerging or innovative commercial off-the-shelf equipment, techniques, products, or methods to determine applicability to increasing reliability, efficiency, or safety of navigation locks. These may include de-icing products, steel and concrete coatings, nano-particles, and/or micro-robotics, to name a few possibilities.

- ERDC Technical Reports, referred journal articles, and technical presentations to Corps infrastructure personnel will be used to transfer test results and conclusions to inland waterway Corps Districts.

Navigation Lock Culvert Valves: excessive forces and vibrations on lock reverse tainter gate valves ($.25M)

- 3-dimensional computational fluid dynamics (CFD) model development will be completed, and results will be validated by physical model laboratory data. Capabilities of the computational model will be documented in a refereed journal paper.
- Optimum lock culvert valve design will be developed and described in an ERDC Technical Report for Corps District application. This design will update the hydraulic design criteria and guidance presently given in EM 1110-2-1610 “Hydraulic Design of Lock Culvert Valves”.

Fiber Reinforced Polymer (FRP) Composites for Rapid Repair of Navigation Structures: repairs at reduced costs and greater durability ($.25M)

- Results from prototype gate investigation using FRP composites will be developed into an ERDC Technical Report.
- An equally important focus will be on repair of deteriorating concrete lock walls using advanced FRP composite technologies.

Hydraulic Steel Structure Rapid Repair Design: fatigue & fracture repairs using FRP strips ($.25M)

- Finite Element Modeling (FEM) bond-slip algorithms will be developed to implement finite element solution to fatigue and fracture using Fiber Reinforced Polymer (FRP) strips.
- Publish ERDC Technical Report regarding parametric analysis of repairs to hydraulic steel structures using FRP strips under controlled laboratory settings.

Water Resources Infrastructure Technology ($3M)

The goals of this research are to develop enabling technologies for more economic repair methods, improve operational efficiency, extend useful life, improve resiliency, adapt for changing conditions and demands, improve public safety, increase performance, and assure environment sustainability. This effort will focus on the science and technology required to address the following areas:

- Detection, measurement, and monitoring of structure or component condition to assess its stability and performance capacity. (**Monitoring**)
- New knowledge to advance capabilities and understand the challenges and requirements for extending the life of infrastructure. (**Phenomenology**)
- Predict infrastructure performance, risk analysis and potential consequences related to mission demands or natural forcing functions. (**Decision Support**)
- Cost effective and sustainable techniques for incorporation into designs, rapid repair, and alternative construction methods. (**Rehabilitation technologies**)
- Methods to analyze, portray, and communicate information regarding existing and newly developed technologies to support planning, engineering, construction, operation and maintenance decisions for USACE Infrastructure (**Technology Support**)

ACCOMPLISHMENTS IN FY 2013:

Periodic Inspection of Navigation Structures

- Broken armor unit surveys of Manasquan Inlet jetties and Cleveland Harbor breakwater were conducted to (1) correlate recent damaged units with extreme storms in the regions, (3) support Operational Condition Assessment (OCA) of USACE Asset Management, and (3) evaluate new data collection equipment for effectiveness of use specific to Corps needs.
- Data were post-processed and uploaded to Enterprise Coastal Inventory Database (ECID).
- Centimeter-accuracy needed for 3-point individual armor unit movement data was demonstrated through use of ground-based LIDAR.

Marmet Locks and Dam, WV: lock guidewalls, approaches, filling system, and control valves

- Navigation conditions were monitored in upper lock approach using 3 time-lapse video systems. Systems focused on upstream long-span thin-walled guide wall to determine how tows use the wall under various river conditions, to evaluate excessive forces by down-bound tows.
- Upper and lower lock approaches were surveyed, and compared to surveys taken in FY12 to determine extent of scour or deposition.
- Underwater remotely operated vehicle used to inspect lock filling system intake, culverts, discharge outlet, and Stoney gate valves to determine concrete deterioration and/or valve cavitation damage. Video collected of each, and compared to video obtained in FY12 to ascertain changed conditions.
- Used numerical simulation model LOCKSIM to evaluate lock performance.

Gulfport Ship Channel, MS: fluid mud and nautical depth

- USACE ERDC ship simulator was integrated with hydraulic coefficients from Flanders Hydraulic Research Institute, Antwerp, Belguim (based on tow-tank results from previous project) to simulate effects on vessel maneuverability in presence of fluid mud.
- Gulfport ship channel was surveyed with state-of-the-art fluid mud survey system, and fluid mud sampling and analyses were conducted to determine suitability of hydraulic coefficients relative to design hull configurations used in simulator. Gulfport pilots conducted runs to validate simulator.
- Hydrographic surveys were collected during dredging to establish nautical depth, reduce dredging frequency, and maintain a safe and efficient channel. (Achieved by identifying and dredging sediment that actually impedes navigation, and not dredging inconsequential muddy water.)

John T. Myers Locks and Dam Trunnion Rods, IN: breakage of rods inside dam concrete piers

- Corrosion protection materials (grease or grout) was inserted into anchor trunnion rod sleeves in full-scale prototype-size test facility to determine response of acoustical signals. The response of both bolted end and grip-nut lock was evaluated. Best performing non-destructive testing (NDT) technique with associated data acquisition and processing instrumentation will be taken to John T. Myers Locks and Dam for field verification.
- ERDC Geotechnical and Structures Laboratory continued repair and replacement research to develop best long-term solution for damaged trunnion rods.

River Information Services (RIS): enhancing inland waterway and traffic information to users

- RIS Center in Pittsburgh, PA, was further developed to include participation by other partners from navigation industry and government agencies, including Port of Pittsburgh Commission. Initial services such as waterway information, traffic information, and traffic management decisions will be refined through testing and made operational in coordination with RIS partners and stakeholders. Additional services will be identified and added or developed through research and testing, and transmitted via Automatic Identification System (AIS) through the Lock Operations and Management Application (LOMA).
- Developed position description for RIS Director as permanent government position at RIS Center.
- Began delivering RIS externally via web services to navigation industry and other inland waterway stakeholders.
- Began prototype of industry portal for automatic electronic reporting of navigation information from industry to government.

Sealing Techniques for Quoin Block Backing Material: reducing navigation lock downtime to replace quoin contact block backing materials

- Constructed prototype-size model of quoin blocks, miter blocks, and steel channels in controlled laboratory environment. Allowed parameters related to surface preparagion, gap size, liquid viscosity and density, and head pressure to be varied during testing.
- Initiated laboratory investigation of sealing techniques for selected quoin block backing materials similar to epoxy grouting compound.

Navigation Lock Culvert Valves: excessive forces and vibrations on lock reverse tainter gate valves

- Conducted laboratory experiments on a 1:15-scale physical model of lock reverse tainter gate valve designs commonly used on USACE navigation locks. Data included forces and vibration tendencies of various gate valve designs.
- ERDC Technical Report was published on field experiences regarding lock culvert valve deficiencies, compiled from District Operations Divisions data.
- Initiated development of 3-dimensional computational fluid dynamics (CFD) model of lock culvert valves.

FRP Composites for Rapid Repair of Navigation Structures: repairs at reduced costs and greater durability

- Guidance was completed for use of composite lumber as replacement of treated timber on lock guide walls and miter gates.
- Investigation was initiated regarding the use of Fiber Reinforced Polymer (FRP) composites to replace steel or wood gates and valves. Prototype gate was installed for testing.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	$1,766,000
Allocation for FY12	$3,804,000
Conference Allowance for FY13	$3,920,000 2/
Estimated Carry-In Funds	$0
President's Budget for FY14	$6,920,000 1/

1/ Estimated Unobligated Carry-In Funding: As of the date this justification sheet was prepared, the total unobligated dollars to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National (Levee) Flood Inventory

AUTHORIZATION: The main complementary authorizations for this work includes 1) Section 221 of the Flood Control Act of 1970, as amended (84 Stat. 1831, 42 U.S.C. l962d-5b) and other legislation authorizes the US Army Corps of Engineers (USACE) to ensure items of cooperation necessary to the functioning of the project for its purposes; 2) Title IX of the Water Resources Development Act (WRDA) 2007, cited as the National Levee Safety Act of 2007 (the Act), authorized the development of National Committee on Levee Safety (NCLS) to make recommendations for a national levee safety program, in addition to, maintaining a national levee database and performing inventories and inspections of levees in the nation; 3) 33 U.S.C. 701n (PL 84-99), provides for, among other things, the repair and restoration of flood risk reduction projects, such as levee systems; and 4) project specific authorities that include levee systems.

LOCATION AND DESCRIPTION: In 2006, USACE created its Levee Safety Program with the mission to assess the integrity and viability of levees and recommend courses of action to make sure that levee systems do not present unacceptable risks to the public, property and environment. Under the Levee Safety Program, USACE launched a major effort to create a National Levee Database and develop a methodology for performing technical risk assessments of existing levee infrastructure. Additionally, since the start of this effort, on November 8, 2007, the Water Resources Development Act (WRDA) of 2007 was enacted into law. Title IX of WRDA 2007 complemented this effort by providing USACE the authority to collect information on levees outside of a current USACE authority. This work represents part of the USACE Levee Safety Program Initiative, a strategic plan to complete the initial collection of baseline information on levees within a USACE authority, including screening level risk assessments and periodic inspections, within three years. This is the second year. At the end of the third year, funding for this remaining item will be adjusted to reflect amount needed to manage and sustain the Levee Safety Program to include maintaining and updating of the National Levee Database.

CONFERENCE AMOUNT FOR FY 2013: $10,000,000 2/

BUDGETED AMOUNT FOR FY 2014: T: $10,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014: It is realized that levees are abundant and integral to reducing risk in many communities, including many highly urbanized areas, in the United States. Yet, the total number and location and condition of all the levees in the US are currently unknown and the public often have only a limited understanding of levees and the risks associated with them. USACE has specific authorities to inspect and assess only levees within one of its authorities which total about 14,500 miles nationwide. Collection of this information has served as the foundational element for many key levee safety program activities, such as risk assessments. However, there have been estimates that there could actually be up to an additional 100,000 miles of levees nationwide. Title IX of WRDA 2007 requires USACE to inventory all the Nation's levees and make publically available their location and condition. It is important to understand how levees are expected to perform and to identify and be prepared for potential consequences in the event of non-performance in order to identify actions that need to be taken in order to reduce risk to life safety.

N: $0

FRM: $10,000,000. USACE will continue efforts to expand the information in the National Levee Database by working with states, focusing initially with those with existing levee databases. USACE will also continue to solicit feedback from users of the database and implement upgrades and software revisions when accommodations can be made. USACE will continue to implement portions of the NCLS recommendations under current authorities, such as further develop tolerable risk guidelines for levees, build upon the USACE Levee Safety Action Classification process to develop a process to quickly identify and prioritize leveed areas with limited information, and work with FEMA to move forward on communicating risk as part of a levee awareness program. In addition, USACE will continue to

aggressively complete initial periodic inspections and screening level risk assessments as part of the Levee Safety Program Initiative.

RC: $0

H: $0

EN: $0

WS: $0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as described above.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National (Multiple Project) Natural Resources Management Activities

AUTHORIZATION: This program is conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

LOCATION AND DESCRIPTION: The National (Multiple Project) Natural Resources Management Activities project allows the Corps to allocate a portion of Civil Works projects appropriated funds to conduct certain, specified operations and maintenance activities that benefit all or a majority of operating Civil Works projects. . This approach—which was formalized in FY 2002 appropriations language—allows multiple project activities to be funded as single entities, rather than on a project-by-project basis. This approach is more efficient and cost effective, reducing administration costs and providing for efficient management and oversight. Providing a nationwide funding source at HQUSACE for centralized procurement of these items used by all operating projects having a natural resources management program precludes the need for funds to be transferred by each project or district to a single procurement agent, a savings of from 60 to 300 transactions a year. An example of such an activity is the procurement of park ranger uniforms through a contract administered by the National Park Service.

CONFERENCE AMOUNT FOR FY 2013: $6,530,000 2/

BUDGETED AMOUNT FOR FY 2014: T: $8,673,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

1. Nationwide (Multiple-Project) NRM Activities that will be accomplished with these funds include the following activities:

a. Natural Resources Management Career Development/Training Support and Material Development. Funds are used to address training and career development issues for the Corps' 2,000 Natural Resources Management (NRM) field staff. Staff needs are served through the development of products, such as exportable training courses to meet established training requirements. Funding this as a nationwide activity is appropriate because all NRM field staff benefit equally from the work accomplished.

b. Park Ranger/Manager Uniforms. The Corps purchases uniforms for field personnel through an interagency contract administered by the National Park Service. Funding this as an interagency, nationwide effort reduces administrative costs by eliminating fund transfer requirements from each individual project to the NPS. Since this arrangement was established in 1984, significant economies of scale have been achieved. Costs include the authorized employee allowance funds (including an HQ-approved increase in replacement allowance), NPS contract administration costs, buy out of discontinued items, program management/committee support, and the purchase of required emblems.

c. Printing and Publishing - Printing of forms, brochures, and similar materials—such as Annual Day Use Passes—used by all Corps projects achieves economies of scale and reduces total administrative and procurement costs. Printed materials are stored at the Corps Publications Depot for distribution to all projects upon request.

d. Sign Standards Manual and Software Update and MCX Operation. A Mandatory Center of Expertise provides technical support and assistance to all projects in the operation of the Corps Sign Standards Program, through the maintenance of the Sign Standards Program Manual and software and providing technical assistance to field users. These efforts allow the Corps to maintain a consistent image that we present to the visiting public. Funding this as a nationwide activity assures competent and timely assistance to users, which increases the consistency, effectiveness and efficiency of the sign program.

e. Volunteer Clearinghouse Operation. The Volunteer Clearinghouse is operated under contract with Goodwill Industries to support volunteer efforts at all Corps projects. Use of a single nationwide contract on this achieves economies of scale and reduces administrative costs by eliminating the need to transfer funds from each project.

f. Water Safety Products. The Corps Water Safety National Operating Center produces and distributes water safety products and programs to all Corps projects. Products educate and inform visitors of the dangers associated with water-oriented recreation. Significant economies of scale have been realized through the centralized administration of this program that assures current and critical topics are covered, using effective media targeted to high-risk groups. Drownings and associated lawsuits have been reduced significantly since the implementation of this program in the mid 1980's. Current command emphasis is requiring an even further reduction of fatalities during the next two years.

g. Nationwide Recreation Visitation Surveys. Recreation surveys will be conducted to generate traffic counter load factor data required to reliably monitor visitation at CE managed recreation areas through the Visitation Estimation and Reporting System (VERS). Surveys will be conducted in regions nationwide using teams of interviewers from the Student Conservation Association. Funding this as a nationwide activity enhances quality control, achieves economies of scale through the use of a single contract and reduces administrative costs by eliminating the need to transfer funds from all projects to the single contracting element.

h. Other Nationwide NRM Activities. The following additional NRM Activities are recommended for funding to achieve cost efficiencies at the national level. Challenge Partnership Seed Funds; Critical Incident Stress Management (CISM) Program; Natural Resources Management Awards; Operations CoP Gateway; Partnership Advisory Committee; Property Protection Program; RecBEST Coach, Assist and Train Team; Career Assignment Program for Operations Project Managers; Visitor Center Initiative/Corps Story; and Bilingual Support Team.

N: $0

FRM: $0

RC: $4,980,000

H: $0

EN: $0

WS: $0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

2. Environmental Management System (EMS) Implementation:

Navigation and Flood Reduction Management Projects: The issuance of the latest revision of Engineering Regulation (ER) 200-2-3 in October 2010 expanded the coverage of the USACE EMS to include all Civil Works missions and facilities with significant environmental compliance requirements, and also incorporated Federal statutory and executive order-based sustainability and energy requirements. The USACE organization-wide EMS incorporates existing facility-level EMSs within a single, USACE-wide systematic management framework. In addition to traditional water, air, waste and materials compliance requirements, the USACE EMS includes the energy, water and petroleum efficiency requirements of the Energy Independence and Security Act of 2007 and the Energy Policy Act of 2005, as well as the

sustainable acquisition, electronics stewardship, waste reduction/recycling, and greenhouse gas accounting and reporting requirements of Executive Orders 13423 and 13514. Funding this as a nationwide activity allows USACE to reduce costs and improve performance by implementing standardized compliance and sustainability policies, procedures, and tools for auditing, data management, metrics, reporting, and management review at USACE facilities without transferring funds from each project to a central source.

a. Energy Independence and Security Act (EISA 2007) Section 432 energy and water evaluations (audits) at USACE Covered Facilities ($1.3M Estimated).

b. Energy and sustainability data management, tracking and reporting; energy management technical and contracting support for audits, advanced/enhanced metering, and alternative financing ($1.2M Estimated).

c. Energy Policy Act (EPAct 2005) Section 103 advanced metering for electricity, natural gas and water utilities at USACE Covered Facilities and other facilities that trigger the Federal Energy Management Program advanced metering threshold ($1.1M Estimated).

d. Environmental Compliance and Sustainability (ECS) Career Assignment Program. Covers TDY costs for two, 5-month developmental assignments at HQ USACE supporting USACE Environmental Compliance, EMS and EO 13514 Sustainability requirements ($0.1M Training Estimated).

N: $2,743,000

FRM: $950,000

RC: $0

H: $0

EN: $0

WS: $0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as described above.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National Coastal Mapping Program

AUTHORIZATION: These efforts are essential to providing data for efficient and effective management of critically important National water resources. Regional Sediment Management (RSM) activities are authorized by Section 516 of WRDA 96.

LOCATION AND DESCRIPTION: Nationwide Program.

CONFERENCE AMOUNT FOR PY-1: T: $6,300,000 2/
BUDGET FOR PY: M: $ O: $ T: $6,300,300 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS:

N: $6,300,000 - The National Coastal Mapping Program is the only Federal coastal mapping program that produces regional, operational data along the coast of the U.S. on a re-occurring basis. Regional Sediment Management requires regional measuring and monitoring to provide engineering, environmental, and economic data and information for decision makers and managers. No other program in the Corps (or other Federal agencies) provides consistent, re-occurring, regional data to characterize physical, environmental, and economic conditions along the shoreline, and their changes over time. Quantification of regional conditions and changes will lead to improved management practices of entire regions and projects within those regions. Without these data, the Corps cannot fulfill its goal of a systems approach to coastal management, including navigation and coastal flood damage reduction projects.

The National Coastal Mapping Program continues evolution of technologies for regional characterization and change detection of engineering, environmental, and economic conditions along the shoreline. CZMIL advances the state-of-the-art in data exploitation workflows, algorithms, hardware, and software, and provides a sustained focus and collaboration among academia, industry, and the federal government to constantly review, refine, and expand our capability to produce a wider range of engineering, environmental, and economic data over a broader range of operating environments.

In FY12, the National Coastal Mapping Program collected data along the Great Lakes shorelines of Erie, Huron, and Michigan for the second time, including over 50 USACE coastal navigation projects, 9 USACE coastal flood damage reduction projects, and over 300 USACE coastal structures. Data collected for the East Coast in 2009 and 2010 were compared to data collected in 2004 and 2005 to provide valuable information about the changing physical, environmental, and economic conditions along this coastline. The CZMIL project fielded a new sensor suite, and in collaboration with Optech Incorporated and the University of Mississippi, tested it in a variety of environmental conditions to fully document its improved technical capabilities and operational requirements.

In FY13 the National Coastal Mapping Program will map the major Hawaiian Islands. This will be the first opportunity for comprehensive assessment of coastal resources on the islands using the new techniques developed under the CZMIL effort. The bathymetry data collected under this effort can be compared to data collected by a joint USACE/NAVOCEANO/NOAA project in 2000 and 2001 to identify areas of erosion along the shoreline and among the coral reefs. Topographic data and hyperspectral imagery can be compared to data collected by a joint USACE/FEMA project in 2007 to identify changes in elevation, infrastructure and habitat. All of this will support the development of sediment budgets for implementation of regional sediment management practices. Products quantifying shoreline, sediment volume, infrastructure, and habitat changes will be generated from repeat datasets on the Great Lakes (2007/2008 to 2011/2012). Development under the CZMIL effort will focus on automating techniques for identification of critical habitats and geomorphological features of importance for coastal management. Hardware evolution will reduce weight and power consumption while software advancements will improve the data fusion processing required to accurately delineate benthic habitat and characterize water quality parameters.

FRM: $0

RC: $0

H: $0

EN: $0

WS: $0

OTHER INFORMATION: Since 2004, the NCMP has collected re-ocurring data in the eastern Gulf of Mexico (4 surveys, 2 of which are post-hurricane), on the southeast Atlantic coast (3 surveys, 1 of which is post-hurricane), and on the northeast Atlantic and Great Lakes coasts (2 surveys each). Second surveys of the West Coast and Western Gulf Coast are scheduled for 2014-2016. The data collected during these surveys have been developed into products that are widely used by the USACE for regional sediment management, regulatory, flood damage reduction, asset management, emergency operations, and environmental stewardship in the coastal zone, and by other agencies: for the FEMA RiskMap modeling efforts; the USGS Coastal and Marine Geology Program's National Assessment of Shoreline Change and extreme storm studies; and NOAA nautical chart production. The data are made available to the public through NOAA's Digital Coast website. State and local agencies use the data for shoreline management, environmental permitting, emergency management, marine spatial planning, and planning for resilient communities. The CZMIL effort has resulted in new airborne technologies and supporting software that improves operational efficiency, decreases time between data collection and final decision-support product, expands the variety of products derived from the basic datasets in a data fusion approach, improves performance in very shallow and turbid waters, improves navigation hazard detection, and improves data accuracy.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National Dam Safety Program – Portfolio Risk Assessment

AUTHORIZATION: Dam safety legislation PL 92-367 and PL 99-662, and the National Dam Safety Program Act (Section 215 of PL 104-303), the Dam Safety and Security Act of 2002 (Public Law 107 - 310) and the Dam Safety Act of 2006 (Public Law 109-460).

LOCATION AND DESCRIPTION: Nationwide Program - The Federal Guidelines for Dam Safety provide a framework for safe construction, operation, and maintenance of Corps dams. Dams must be constructed, operated, and maintained in accordance with sound engineering practices to prevent failure and avoid potential loss of life and destruction of property. This National Dam Safety Program (NDSP) account consists of two parts: (1) operation of the NDSP including participation with other agencies; and (2) implementation of a risk analysis program for all Corps dams, including recurring mapping and interim risk reduction work. Corps has 708 Dams that are located at 557 projects. The number of dams includes appurtenant structures (saddle dams, levees, dikes) that have different consequences downstream from the main dam.

(1) The NDSP was established to enhance national dam safety. These funds support the activities under the NDSP, in the interests of the Corps and the citizens of the Nation. The National Dam Safety Program Act strengthens the NDSP, whose purpose is to reduce risks to life and property from dam failure in the United States. The Act also codified the Interagency Committee of Dam Safety (ICODS) to coordinate the Federal actions under the NDSP. The Chief, Engineering and Construction, Directorate of Civil Works (USACE, Dam Safety Officer), or his representative, represents the Department of Defense as a member of ICODS. The Corps also provides a representative on behalf of the Secretary of Defense to the National Dam Safety Review Board. The National Dam Safety Program Act expanded the scope of previous dam safety legislation and the requirements for ICODS participation with various states to improve dam safety in the United States. Through ICODS, the NDSP provides support in development of federal guidelines for dam safety, promotion of public awareness programs, publications, training materials, workshops, and post dam failure forensic team participation. The Act also provides for archival research that is supported by Federal dam owning agencies through ICODS and the National Performance of Dams Program.

(2) While no Corps dams are in imminent danger of failure, many of them have high dam-safety risks during extremely large floods or seismic events, with particular concern for seepage and piping related problems. The need to prioritize budget activities requires that the Corps uses risk assessment as a central part of the decision-making process to direct funding to those dam safety issues presenting the greatest risk and to those rehabilitation actions that result in the greatest risk reduction for their cost. For each dam in the portfolio, the risk assessment provides estimates of the probability of failure and consequences by each initiating event. In addition, risk reduction measures are formulated and their cost and effectiveness estimated. The results arrayed by risk level and risk reduction cost effectiveness allow risk informed decision making. The portfolio risk assessment (PRA) process has demonstrated its value starting in Fiscal Year 2005 by identifying a number of dams with high risks. The initial screening of all Corps projects was completed in Fiscal Year 2012. The requested Fiscal Year 2013 funding will be used to perform detailed risk analysis on the highest risk dams in the portfolio and identify appropriate studies and corrective actions necessary to meet the Corps dam safety responsibilities.

CONFERENCE AMOUNT FOR FY 2013: $10,000,000 2/

BUDGETED AMOUNT FOR FY 2014: M: $0 O: $10,000,000 T: $10,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: $0

FRM: $10,000,000 will be used (1) for the effective coordination of dam safety activities across the various regions of the Corps and provides for Corps participation at national dam safety events. The account also provides for District participation on the National Dam Safety Steering Committee and Policy and Procedures Team, which advises the Corps Dam Safety Officer and Special Assistant for Dam and Levee Safety. The NDSP supports Corps membership and participation in various national and international dam organizations including the Association of State Dam Safety Officials (ASDSO), the US Society on Dams (USSD) and the Dam Safety Interest Group (DSIG). The USSD along with its international counterpart, the International Committee on Large Dams (ICOLD) supports technical knowledge concerning the benefits, engineering, design, and construction of dams. The DSIG is an international group of dam owners involved in dam engineering. Participation with the DSIG allows the Corps to leverage limited Civil Works policy development funds;

(2) forh the direction and management of the Corps-wide Portfolio Risk Assessment (PRA) efforts by the Risk Management Center. Additional effort is needed to make the evaluation process more effective and sustainable along with integrating the inspections and evaluations with the asset management program. Dams are dynamic and degrade at varying rates, so continuing efforts are needed to assure best use of limited future investments. Recurring assessments at 10-year intervals will be continued on the portfolio and will improve the understanding of project risks that were initially identified with the screening level PRA's. The districts are responsible for collecting appropriate project data, assisting in the analysis of data gaps, using expert judgment to estimate for missing parameters, coordinating meetings, correspondence, and site visits, if required, updating essential plan, studies, or reports, and participating in training on risk analysis and probability methods. The national cadres, under the direction of the Risk Management Center, will lead risk analysis; evaluate the effectiveness of interim risk reduction measures, and identify project specific follow-on actions. The results of the detailed PRA's will be used at the national level to further formulate study plans for inclusion in the regular budget cycles, identify appropriate corrective actions, and determine the urgency of such actions. Common risk methodologies for dam and levees will be further developed. Work will begin to update the Dam Safety Investment Plan (DSIP), with the ultimate goal of determining short and long term construction strategies for modification and repair of all high risk dams in the portfolio. This investment plan will be used to demonstrate how these strategic investments reduce the overall risk of our national portfolio in the most efficient and cost effective manner. This investment Plan will also provide short and long term budget forecasting requirements for requesting both WEDGE funds and Construction General (CG) funding as part of the normal budgeting cycle. The database of information from the PRA will be linked to the existing Dam Safety Program Management Tools (DSPMT) and the Operations & Maintenance Budget Information Link (OMBIL) to maximize the use of the information developed. Additional emphasis will be placed on the completion of inundation mapping at all DSAC I, II, and III dams to further improve emergency preparedness which decreases potential life safety consequences; and

(3) Other advancements are being made in technical areas related to dams such as investigations of dam internal erosion, filtering materials, seepage and piping incidents, dam grouting, spillway systems reliability, dam instrumentation, and hydrologic methodology development. The NDSP account allows for updating of USACE technical manuals (Engineering Manuals, Engineering Circulars, etc.) such as cutoff wall construction, dam foundation grouting, and drilling through embankments.

RC: $0

H: $0

EN: $0

WS: $0

OTHER INFORMATION: This project is a Corps wide Dam Safety Program directed and managed by the Dam Safety Team at HQUSACE and the Risk Management Center.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2104 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National Emergency Preparedness Program (NEPP)

AUTHORIZATION: Executive Orders 10480 and 12656 and the Department of Homeland Security (DHS), Federal Emergency Management (FEMA) under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 USC 5121 et seq. are the basis of the National Response Framework.

LOCATION AND DESCRIPTION: N/A

CONFERENCE AMOUNT FOR FY 2013: $6,200,000 2/

BUDGETED AMOUNT FOR FY 2014: $6,750,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

The budget will continue implementation of the National Emergency Preparedness Program to include training, participation in and conducting national level exercises, interagency and intergovernmental coordination, catastrophic disaster planning and updating and exercising continuity of operations plans. We will continue to play a key role in national security planning such as supporting Homeland Security strategic planning efforts, development of the National Capitol Region Response Plan, National Disaster Recovery Framework (NDRF), update to the National Response Framework, catastrophic hurricane and earthquake responses, and other man-made contingencies with national implications. Completing/updating plans and regional readiness workshops for National Level Exercise (NLE) Capstone event under the revised National Exercise Program (NEP) and NEP I-Plan, in conjunction with DHS/FEMA.

The FY 2014 budget of $6.75 million is an increase of $550,000 from the latest estimate $6.2 million presented to Congress (FY 2013). These funds will support preparedness activities as national level preparedness plans and related work, and minimal manning of Emergency Operation Centers.

This program requires that the Corps is ready to provide rapid response to disaster, whether caused by natural phenomena or man-made disaster or acts of terrorism and support continuity of operations and government; assure the availability of a work force capable of shifting from routine missions to crisis operations; and have the organizational command and control structure(s) necessary to provide a coordinated comprehensive response in the critical early stages of a catastrophic disaster. Preparedness activities include development of national level preparedness plans, train employees, conduct national level training exercises, to include support to Federal Emergency Management Agency (FEMA) exercises, coordinate within DOD, other Federal agencies, and state and local governments. NEPP also provides USACE with the ability to engage and coordinate readiness with other agencies at the National level on programs of Federal primacy or interests.

The Corps provides engineering and construction support to state and local governments in response to catastrophic natural/technological disasters. Our divisions also have a key role in the planning, coordination and operational control of multi-district response(s) and the integrated preparedness effort required for accomplishing this response. Preparation also includes the Headquarters sponsored Corps-wide programs necessary to provide the capabilities and operational command and control required by Corps field commands in order to accomplish their NEPP responsibilities, both routinely and in specific emergency response situations.

NEPP is complementary to the Flood Control and Coastal Emergencies (FCCE) appropriation. Although both programs are related to emergency situations, there is a distinct separation of responsibilities. NEPP responsibilities are described in above paragraphs. FCCE, on the other hand, provides preparedness and response related to emergency flood fighting, post-flood repair and restoration of flood and shore protection works damaged or destroyed by floods, hurricanes or wave action and Corps preparedness associated with National Response Plan/Framework mission requirements.

OTHER INFORMATION: ACCOMPLISHMENTS IN PRIOR YEARS-- In FY 2013, the focus will be to build up to the National Level Exercise Capstone in FY 14 and develop objectives and corresponding scenarios. The Combined Response Mission Exercise will be conducted in conjunction with the Northeast Express Exercise and the state of New York with likely involvement from the states of New Jersey, Connecticut and corresponding FEMA Regions. This exercise will be used to prepared national water, ice, emergency power, infrastructure assessment, enterprise emergency response and other planning and response teams.

FY 2012 NLE examined the Nation's ability to coordinate and implement prevention, preparedness, response and recovery plans and capabilities pertaining to a series of significant nation security cyber vents with physical impacts. It examined the National Response Framework (NRF) Cyber Incident Annex and the National Cyber Incident Response Plan. Lessons learned from NLE-12 prompted preparatory measures to real-world events such as the formation of a Cyber Threat Working Group to maintain a constant focus. Additional efforts focus on continuing to strengthen COOP readiness including in response to a cyber attack. Exercises, involving federal, state and local officials, have contributed to a more timely and effective execution of Corps responsibilities during disasters that have national impacts. Urban Search and Rescue (US&R) Training was conducted to recertify cadre members to advanced Structures Specialists. Seminars, workshops, and exercises, such as mentioned above, have strengthened partnerships and promoted mutual understanding of the roles, responsibilities and interests of USACE, FEMA, other Federal agencies, and State and local governments involved in natural disasters and terrorists' responses.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 1M. This amount will be used to provide initial activation/manning of UOC, Divisions/District EOCs, and RSC and Cadre members to response to natural or catastrophic disasters.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: National Portfolio Assessment for Reallocations

AUTHORIZATION: Specific project authorizations, Section 216 of the River and Harbor and Flood Control Act of 1970.

LOCATION AND DESCRIPTION: This is a national program.

CONFERENCE AMOUNT FOR FY 2013: $571,000 2/

BUDGETED AMOUNT FOR FY 2014: $571,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N: N/A

FRM: N/A

RC: N/A

H: N/A

EN:

WS: **Assessment of Data. $286,000** will be used to finalize the National Portfolio Assessment of Data for Reallocations: Status and Challenges for USACE Reservoirs. The report will leverage data gathered and analyzed as part of the National Portfolio for Reallocations and from other collaborative efforts. Ultimately, the goal of the data assessment includes developing a project by project projection of water supply availability and sustainability over the next 10, 20 and 50 year periods, the ability to roll the developed data up into basin and regional projections which can support watershed based efforts and developing a program to keep the data current.

The National Portfolio Assessment for Reallocations was a two year appraisal, initiated in FY 2008, to develop a portfolio of existing Corps of Engineer multipurpose projects to be used as a screening tool to identify the best candidates for opportunities for operational changes and/or reallocation opportunities. This effort resulted in (1) the development of a portfolio of Corps projects that identified the best candidates for opportunities for operational changes and/or reallocation opportunities to ensure existing Corps reservoirs contribute to enhance economic and ecosystem values as water demands evolve and a better understanding of climate change issues are gained and (2) a paper on alternative funding arrangements for water supply reallocation studies. This report was transmitted to HQUSACE by the Institute for Water Resources in June 2010 and by HQUSACE to the ASA (CW) in August 2010.

During the development of the survey for the National Portfolio Assessment, the Corps was considering two other national surveys, one on the water management aspects of Corps reservoir projects and an other on sedimentation management concerns. USACE leaders recognized that combining these efforts would result in cost and time savings. This combined effort provided not only data for the Portfolio but also created a database to examine the status of Corps water management from local, regional, and national perspectives, an engineering and scientific foundation for a national adaptive management program, a baseline data set for investigating the evolution of operational water management policies, an assessment of sediment infilling, its impacts to operating purposes and management practices, and a database for sediment data collection efforts.

While water and sediment management concerns were originally incorporated to encourage efficiencies between reservoir-oriented data requests, these efforts have proven relevant to the assessment of

reallocation opportunities at multi-purpose reservoirs where any change in operation affects multiple purposes. As a result, after the initial Portfolio Report was completed, this effort was transformed into an Assessment of Data study for FY 2011 and FY 2012 and included the water supply, water management, and sediment management components as well information gained through collaboration with other USACE work efforts.

Sustainable Rivers. $285,000 will be used to advance an ongoing effort to improve practices for evaluating evolving water demands from an environmental perspective. This includes:

- Support the definition of environmental flow needs
- Model application and development
- Implementation of operational changes to meet environmental flow needs
- Monitoring and initiation of a process to revise water control plans

Experiences at existing sites will be used to inform other efforts to modify project operations and refine the practices for evaluating evolving water demands.

The Sustainable Rivers Project (SRP) was initiated in 2002. SRP is an ongoing national partnership between the Corps of Engineers and The Nature Conservancy. The purposes of this effort are to assess ecosystem needs downstream of Corps projects, to evaluate water management opportunities for potential operational changes and/or reallocations to enhance ecosystem values while maintaining or improving primary project purposes (e.g. flood risk reduction, water supply, and hydropower), and to implement environmental flows where feasible.

The SRP involves work on 36 Corps reservoirs in 8 river basins. It is the most large-scale and comprehensive project for implementing environmental flows below Corps reservoirs. Funds from the National Portfolio Assessment for Reallocations (2010-2013) have been instrumental in the advancement of SRP, which has now defined environmental flows for 20 reservoirs and implemented environmental flows at 10, thereby affecting ecological condition for approximately 600 river miles. The Portfolio is currently the only national funding source for the SRP. Full implementation of environmental flows below Corps reservoirs would benefit an estimated 50,000 river miles.

Funding from the Portfolio will be used to support a combination of national level and site specific work. National level work focuses on measuring and communicating the successes of the whole SRP. Site work will define ecological needs, model potential operational changes, and implement and monitor ecological outcomes resulting from changes to the operation of particular reservoir systems. SRP efforts complement the national portfolio assessment by demonstrating that a strategic and science-based adaptive management approach that can be used at Corps projects to maintain or enhance the benefits they provide to the nation. This Sustainable Rivers Project was combined with the National Portfolio Assessment in FY 2010 under the recommended plan.

OTHER INFORMATION:

ACCOMPLISHMENTS IN FY 2013:

The fiscal year 2013 funding of $571,000 was a two-increment effort.

Assessment of Data. Funding in the amount of $286,000 was used to: (a) initiate an effort to complete the compilation of Corps' projects in the Portfolio to include all our projects with irrigation storage. While repayment of irrigation costs are administered by the Bureau of Reclamation, the general physical and operating data of these projects and the knowledge of how these projects operate for irrigation is critical to complete the Portfolio of Corps projects with water supply; and (b) initiate the development of a draft report on the National Portfolio Assessment of Data for Reallocations: Status and Challenges for USACE Reservoirs.

Sustainable Rivers. Funding in the amount of $285,000 was used to continue the efforts of described above to improve practices for evaluation water demands. These efforts included development and

application of models for use at select Corps Sustainable Rivers Project sites, defining environmental flow needs, implementation operational changes to meet environmental flow needs and development of a framework to inform nationwide application of the knowledge gained through the implementation of the Sustainable Rivers Program.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is 0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Program Development Technical Support

AUTHORIZATION: The automated information system P2 has replaced the Automated Budget System (ABS) for budget development processes. The transition to P2 from ABS has aligned all Civil Works budget requests within one automated information system (AIS). Previously, the ABS supported gathering, analyzing and submitting project funding requests to respond to all authorized missions within the Corps of Engineers Operation and Maintenance program.

LOCATION AND DESCRIPTION: This is program National in scope.

CONFERENCE AMOUNT FOR FY 2013: $300,000 2/

BUDGETED AMOUNT FOR FY 2014: $300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014: Funds will be used to continue to assist civil works program development for budget submissions and identify needed changes and recommend new analytical program development tools and procedures to support civil works program development. P2 provides the program development capability previously provided by ABS. The transition to P2 from ABS for program development began in FY 2007 and continued through FY 2011. Presently work under this activity in current and future years continues to ensure that all relevant business processes and monitoring needs are incorporated into new databases, data requirements continue to be refined, and analytical capabilities are being expanded to support the Corps' budgeting process without creating an undue administrative burden. Changes are being incorporated to support the budget development analytical and reporting needs and to continually refine the system to meet evolving objectives. The deployment of P2 and updated versions has shifted program efforts towards development of methods and procedures for setting program priorities and providing technical support for all civil works activities and analysis across the civil works program. In FY14 this project will continue to assist civil works program development for budget submissions and identify needed changes and recommend new analytical program development tools and procedures to support civil works program development. All business lines benefit from this activity.

N: $75,000

FRM: $78,000

RC: N/A

H: $72,000

EN: $75,000

WS: N/A

OTHER INFORMATION: NA

ACCOMPLISHMENTS IN PRIOR YEARS: Maintained and updated the software systems, provided new tools to generate reports, provided training and support to managers, and enhanced analytical tools to support the budget development process.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Protection of Navigation (Four Items)
Protection, Clearing, and Straightening of Channels
Removal of Sunken Vessels
Waterborne Commerce Statistics
Harbor Maintenance Tax Data Collection (formerly called Harbor Maintenance Fee Data Collection)

AUTHORIZATION:
Protection, Clearing, and Straightening of Channels - Section 3 of the 1945 River and Harbor Act (as amended by Section 915 (g) of the Water Resources Development Act of 1986) provides continuing authority for limited emergency clearing of navigation channels not specifically authorized by Congress.

Removal of Sunken Vessels - Removal of sunken vessels, or other similar obstructions, is governed by Sections 15, 19, and 20 of the River and Harbor Act of 1899, as amended.

Waterborne Commerce Statistics - The Corps of Engineers (Corps) serves as the Federal Central Collection Agency, and is the sole U.S. Government source for U.S. domestic waterborne commerce and vessel statistics in conformance with the River and Harbor Act of 1922 as amended. The Office of Management and Budget (OMB) pursuant to Title 44 U.S.C. 3509 and 3510 transferred primary responsibility for U.S. foreign waterborne transportation statistics mission from the Bureau of the Census to the Corps in 1998.

Harbor Maintenance Tax Data Collection - PL 103-182.

LOCATION AND DESCRIPTION: This is a national program.

CONFERENCE AMOUNT FOR FY 2013: $6,146,000 2/

BUDGETED AMOUNT FOR FY 2014: $6,146,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

N:

Protection, Clearing, and Straightening of Channels. $50,000 will be used for work undertaken as emergency measures to clear or remove unreasonable obstructions to navigation in navigable portions of rivers, harbors and other waterways of the U.S., or tributaries thereof, in order to provide existing traffic with immediate and significant benefit. The amount requested is an estimate based on historical experience. If actual requirements are more than estimated, funds will be reprogrammed to meet demonstrated needs.

Removal of Sunken Vessels. $500,000 will be used to remove vessels as needed. Primary responsibility for removal belongs to the owner, operator, or lessee. If the obstruction is a hazard to navigation and removal is not undertaken promptly and diligently, the Corps may obtain a court judgment requiring removal, or remove the wreck and seek reimbursement for the full cost of removal and disposal. Determinations of hazards to navigation and Federal marking and removal actions are coordinated with the United States Coast Guard in accordance with a Memorandum of Understanding between the two agencies dated 16 October 1985. Removal procedures are outlined in 33 CFR 245. If removal requirements are more than estimated, funds will be reprogrammed to meet actual needs.

Waterborne Commerce Statistics (WCS). $4,771,000 will be used to develop data that provide essential information for navigation project investment analyses and annual funding prioritization for operation and maintenance of existing projects; as project output information for computation of performance measures; for input into the U.S. National Accounts; and for regulatory, emergency management decisions, and homeland defense. Activities supporting this national statistics mission include: (1) collecting and reporting (includes enforcement role) of water transportation statistical data; (2) automated systems development and operation (transactional systems within Operation and Maintenance corporate information system), processing, compiling, and publishing statistical data and information on waterborne commerce and vessels moving on the internal U.S. waterways, the Great Lakes, and through all U.S. ocean channels and ports; and (3) documenting and publishing the Nation's commercial port infrastructure served by Federal channels; (4) documenting and publishing the U.S. vessels available for operation in waterborne commerce, their principal trades and zones of operation; and (5) acquiring and using software tools for program analysis, diagnostics and quality control. This item is reported under OMBIL-Plus in ITIPS and the 300b submittal accounting for $1,645,248 of the overall total OMBIL-Plus cost for FY14.

Proposed activities for fiscal year 2014 include: Perform operations, maintenance and necessary enhancements of nation's waterborne commerce, vessel and shipper data and statistics programs. Implementation, and with continued modification of Corps automated systems, to accept new real-time domestic electronic data to improve accuracy of domestic and foreign transportation statistics. Increase project detail data requirement for budget submissions and economic justification. Acquiring and using software tools for program analysis, diagnostics and quality control. Expansion of water transportation data connection with landside movements and improve navigation architecture to support national multimodal freight policy. Collaborate with partner agencies to improve navigation data from a Federal perspective.

Harbor Maintenance Tax (HMT) Data Collection. $825,000 will be used by the Corps to perform analyses of the Harbor Maintenance Trust Fund (HMTF). Up to $5 million is authorized to be used annually for the administration of the Harbor Maintenance Trust Fund. Most of these funds are used by U.S. Customs and Border Protection (CBP). The Corps performs analyses of the HMTF revenues and transfers to validate the adequacy of the HMTF in light of the uncertainty over the legal and international challenges to the HMT, to document the operation of the trust fund, and to prepare and distribute the Annual Report to Congress on the Status of the Harbor Maintenance Trust Fund. Analysis of waterborne commerce shipments and vessel movement data is also needed to respond to legal questions to the HMT; to analyze alternative funding options; and to assess the economic and competitiveness impacts of other potential funding sources. The Corps is also required to collect data on foreign and domestic shippers subject to the fee. Therefore, the Corps requires a portion of the administrative funding to continue its ongoing HMTF support efforts. The General Accountability Office (GAO) issued its final report (GAO-08-321), which recommend that the CBP and the Corps improve their coordination and procedures in order to increase HMT collections by auditing domestic shippers failing to pay or under paying the HMT mandated by law. This item is reported under OMBIL-Plus in ITIPS and the 300b submittal accounting for $346,368 of the overall total OMBIL-Plus cost for FY14.

Proposed activities for fiscal year 2014 include: Collaborate with CBP to improve CBP-Corps data communication systems to target delinquent domestic shippers for audit to increase HMT collections. Continue ongoing HMT data collection and analysis programs. Develop and implement improved data collection process systems and data analysis models and program computer enhancements to provide more complete/accurate domestic shipper information.

FRM: N/A

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION:

ACCOMPLISHMENTS (WCS / HMT) IN FY 2013: For these continuing programs maintained FY 2013 data quality and completeness. Provided enhanced navigation project output data for budget formulation. Continued work with other Federal agencies and industry to implement a new modern, comprehensive automated domestic waterborne data collection system. Established partnerships and data exchanges with other Federal agencies (CBP, IRS, USCG and EPA), and industry to improve the accuracy, availability and timeliness of the data the Corps collects for managing capital investments in Corps projects. Integrated the Corps location codes into the Automated Identification System (AIS) encoding guide, enabling mariners to report the code electronically through AIS. Established a process to receive updates on location codes from USCG, improving the quality of the Corps' inventory of dock data. Continued ongoing HMT data collection and analysis programs. Improved systems to collect and process HMT data for domestic shippers. Streamlined efforts in providing domestic shipper data to CBP and follow-up research requested by CBP for HMT audits.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work on the project as follows: N/A.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Recreation One Stop (R1S)

AUTHORIZATION: These programs are conducted under the general authority of PL 78-534, the Flood Control Act of 1944 (58 Stat. 887).

LOCATION AND DESCRIPTION: The Recreation One Stop initiative is to enhance customer satisfaction with recreational experiences on public lands. It improves access to recreation-related information generated by the Federal government, streamlines the systems used to manage that information, and increases the sharing of recreation-related information among government and non-government organizations. At the direction of Office of Management and Budget (OMB), Recreation.gov and Volunteer.gov was combined and is now under the umbrella of Recreation One Stop, a priority E-gov initiative on the President's Management Agenda. Providing a nationwide funding source at HQUSACE for centralized procurement of these items used by all operating projects having a natural resources management program precludes the need for funds to be transferred by each project or district to a single procurement agent, a savings of from 60 to 300 transactions a year.

CONFERENCE AMOUNT FOR FY 2013: $65,000 2/

BUDGETED AMOUNT FOR FY 2014: T: $215,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 2014:

Recreation.gov - $200,000 - is an interagency website providing public information about recreation opportunities on federal lands. This website provides a customer friendly recreation portal with information for planning visits to Federal recreation sites and making campground reservations. Required budgeted amount provides payment IAW Interagency Agreement NO.10-1A-11132461-167 between the National Recreation Reservation Service as managed by US Forest Service and Department of Defense. This annual funding supports the Corps responsibility of providing funds for the management and operations costs of the Recreation One-Stop initiative. Recreation.gov provides a customer friendly recreation portal with information for viewing and planning visits on over 4,000 Corps recreation sites and activities, reserve and make payment on line. Recreation.gov provides a customer friendly recreation portal with information for viewing and planning visits on over 4,000 Corps recreation sites and activities, reserve and make payment on line.

Volunteer.gov - $15,000 is an interagency website coordinating volunteer activities among federal agencies. Provides a user-friendly, web based resource to citizens, offering a single point of access to information about volunteer opportunities nationwide. Volunteer.gov is a partner in the White House's USA FreedomCorps Network, and the site is also linked to the Recreation.gov website in which the Corps participates. Required budgeted amount provides payment to Department of Interior (DOI) as the managing partner IAW February 2000 Federal Interagency Team on Volunteerism Memorandum of Understanding. This annual funding supports the Corps responsibility of providing funds for the management and operations costs of the Recreation One-Stop initiative. Volunteer.gov provides a comprehensive clearinghouse of Corps volunteer opportunities. The public can enter geographic information about where they want to get involved and areas of interest to access volunteer opportunities offered by the Corps. Over 55,000 volunteers at Corps projects worked 1.4 million hours, providing $29.7 million value of service in fiscal year 2011.

N: $0

FRM: $0

RC: $215,000

H: $0

Division: HQUSACE District: HQUSACE Recreation One Stop (R1S)

EN: $0

WS: $0

OTHER INFORMATION: This project is an agency-wide project that is directed by HQUSACE.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $0. This amount will be used to perform work as described above.

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Reducing Civil Works Vulnerability (New Start)

AUTHORIZATION: Various authorities including Section 216 of the River and Harbor and Flood Control Act of 1970, Section 731 of the Water Resources Development Act of 1986, specific project and purpose authorizations, and Executive Order 13514.

LOCATION AND DESCRIPTION: O&M Remaining Item, Nationwide. The Reducing Civil Works Vulnerability (RCWV) program will direct and coordinate the development of comprehensive and integrated policies, guidance, tools, and actions to reduce USACE vulnerabilities and improve resilience to these challenges, including changes in demographics, land use and land cover, social values and social vulnerability, economic conditions, ecosystem habitat suitability, climate change and variability, and aging infrastructure. This requires close coordination and integration with complementary activities, including programs supporting CW mission areas and those supporting critical issues (e.g., asset management, budget transformation, planning modernization, climate change, and sustainability and energy). The RCWV program will benefit all CW programs by its comprehensive systems approach to characterizing vulnerabilities. The program will conduct regional- to national-scale vulnerability assessments to support prioritization of future actions to manage the impacts of these challenges. RCWV will build on existing collaborative mechanisms to improve our ability to foresee, understand, take action, and effectively act to mitigate adverse impacts of complex dynamic processes.

CONFERENCE AMOUNT FOR FY 13: $ 0

BUDGETED AMOUNT FOR FY 14: $1,000,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 14:

N: $250,000 will be used to assess vulnerability due to impacts and interactions of dynamic changes across regions, and identify and characterize sources of uncertainty that affect decision making to reduce vulnerabilities and improve resilience of the Nation's existing marine transportation systems. Develop policies and methods supporting consistent management strategies for dealing with dynamic changes in all phases of the life cycle, building on existing tools, methods, and geospatial database systems to support assessments, reporting and access to results.

FRM: $150,000 will be used to evaluate measures to reduce vulnerabilities and improve resilience of flood risk management systems. Improve data aggregation, integration, assessment, and visualization to better understand vulnerabilities in the context of complex and interdependent systems and watersheds with multiple purpose projects, and using established geospatial systems developed to support flood risk management. Update water management and reservoir management policies to take into account dynamic challenges to flood risk management according to strategic and priority needs, building on flexibility where it exists.

RC: N/A

H: $500,000 will be used to will be used to assess vulnerability of hydropower projects due to impacts and interactions of dynamic changes. Identify and characterize sources of uncertainty that affect decision making required to implement measures to reduce vulnerabilities and improve hydropower resilience. Update water management and reservoir management policies to take into account dynamic challenges to hydropower according to strategic and priority needs, building on flexibility where it exists.

EN: $100,000 will be used to assess vulnerability of ecosystems due to impacts and interactions of dynamic changes. Identify and characterize sources of uncertainty that affect decision making required to reduce these vulnerabilities. Evaluate measures to reduce vulnerabilities and improve resilience of ecosystems. Improve data aggregation, integration, assessment, and visualization to better understand vulnerabilities in the context of complex and interdependent systems and watersheds with multiple purpose projects, and using established geospatial system.

WS: N/A

OTHER INFORMATION: The Civil Works Strategic Plan identifies challenges to the Civil Works operations and missions, including changes in demographics, land use and land cover, social values and social vulnerability, economic conditions, ecosystem habitat suitability, climate change and variability, and aging infrastructure that threaten the performance of USACE projects and systems. These changes can and do interact in ways that alter or increase the vulnerability of Civil Works (CW) projects, programs, missions, and operations. Vulnerability can also occur from unintended consequences and cascading impacts due to apparently unrelated decisions. Many of these changes are interacting now and threatening performance, but there has been no single and overarching program to evaluate and minimize adverse impacts until this program. This program will also develop and initiate a strategy and policy to foster efficient and informative sharing inside USACE and to other agencies of the technical information needed to effectively reduce vulnerability and improve resiliency of the built infrastructure and the natural environment. It will also involve USACE staff at all levels and in all regions in developing methods and policies to build knowledge and capacity, guidance and approaches for effective water resources management despite emerging challenges.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

O&M Justification Sheet

PROJECT NAME: Regional Sediment Management Program (RSM)

AUTHORIZATION: Section 516 of WRDA 96 authorizes the development of long-term strategies for the management and control of sediments through studies and operational activities.

CONFERENCE AMT. FOR FY 2013: $1,800,000 2/

BUDGETED AMT. FOR FY 2014: $1,800,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATION FOR FY 2014:

The RSM Program objectives are to establish regional management strategies that link the sediment management actions at authorized Corps of Engineers (Corps) projects with one another, and to coordinate management activities with other Federal agencies, State, and local governments within the boundaries of physical systems including inland watersheds, rivers, estuaries, and the coast. The goal is to demonstrate short- and long-term cost savings and increased economic and environmental benefits through adaptive management of sediments from a regional perspective. The approach provides opportunities to achieve greater effectiveness and efficiency and to realize significant cost savings relative to traditional project management practices. Cost savings may be realized from reduced re-handling of material, optimized use or placement of material extended dredging cycles and combined equipment mobilization and demobilization for linked projects (e.g., dredging and shore protection). Costs may also be reduced by sharing information, improved data management, and reduced duplication of field data collection, or by reducing duplication in model and tool development and application.

PROPOSED ACTIVITIES FOR FY 2014: Continue implementation of RSM through support to Districts and Divisions to include, but not be limited to:

- The RSM National Program will continue to coordinate efforts to promote systems-based technologies and approaches to improve sediment management practices and optimize use of sediments in support of the USACE Civil Works mission. Major RSM National Program activities will include: expanding to include Engineering With Nature concepts; coordination across the USACE Districts and Divisions to share knowledge and lessons learned; sponsoring the annual RSM Workshop and In-Progress-Review to promote program goals, share knowledge and experiences, and technology transfer among RSM practitioners; participating in regional and national initiatives to promote the RSM concepts and approach; and presenting RSM Program benefits and goals to national and international audiences at major conferences.

- Continue to expand regional approaches developed for the operation and management of navigation projects to a Corps-wide capability. The improved regional approach to the navigation program assists nationally to identify common issues that are better solved on a regional basis, improve channel availability and subsequently life cycle costs and project benefits through more efficient practices, and improve regional efficiencies by engaging cross-mission objectives of the Corps (i.e., navigation, flood risk management, and environmental restoration regarding sediments).

- Outreach and apply lessons learned through the Jacksonville District. St John's, Duval, and Nassau Counties and the Tampa Bay efforts to apply regional approaches to link multiple projects (navigation, shore protection, environmental enhancement) across a region resulting in improved use of sediments, optimized operational efficiencies, increased benefits, cost savings, and collaboration with federal and non-federal partners.

- Coordinate and implement sediment management actions identified through the collaborative Delaware Estuary RSM and Engineering With Nature effort to better understand the hydrodynamic, sediment, and environmental processes; improve dredging and placement

efficiencies; identify beneficial use opportunities; and link multiple projects. Actions will be coordinated with partners and stakeholders to ensure needs are met.

- Coordinate and implement sediment management actions identified through the FY13 efforts across the Districts. Identified actions will optimize the use of sediments to improve operational efficiencies while keeping sediments in the system, reducing shoreline erosion, reducing sedimentation, and/or improve environmental habitat while reducing overall costs by linking projects, reducing timelines, and leveraging data, information, and resources. Actions will be coordinated with partners and stakeholders to ensure needs are met.

- Continue integration of Corps dredging, sediment, and monitoring related databases to provide data access and tools to assist in the management of sediment and dredging information, project information, etc to provide the capability to identify needs and opportunities to implement sediment management strategies.

- Continue development of nearshore berm guidance to address challenges with nearshore placement, modify existing numerical modeling capabilities to provide tools to assist in the evaluation, design, placement, and monitoring of nearshore berms for improved sediment management. Continue incorporation of fine-grained sediments.

- Continue development of District's regional sediment budgets, building the sediment budget repository, and enhancing the Sediment Budget Analysis System.

ACCOMPLISHMENTS FOR FY 2013:

- Expanded regional approaches developed for the operation and management of navigation projects in Philadelphia and Baltimore Districts to Mobile and Charleston Districts. The improved regional approach to the navigation program assists nationally to identify common issues that are better solved on a regional basis, improving channel availability and subsequently life cycle costs and project benefits through more efficient practices, and improving regional efficiencies by engaging cross-mission objectives of the Corps (i.e., navigation, flood risk management, and environmental restoration regarding sediments).

- Outreached and apply lessons learned through the Mobile Bay Watershed and In-Bay Disposal effort to a broader watershed perspective for sediment and related environmental management planning and implementation. By linking the watershed and coastal environments through application of RSM and Engineering With Nature concepts, we will improve our understanding of the watershed processes, environmental processes, and improve our ability to make informed, cooperative, sustainable watershed management decisions.

- Coordinated and implemented sediment management actions identified through the FY12 efforts across the Districts. Identified actions optimized the use of sediments to improve operational efficiencies while keeping sediments in the system, reducing shoreline erosion, reducing sedimentation, and/or improved environmental habitat while reducing overall costs by linking projects, reducing timelines, and leveraging data, information, and resources. Actions were coordinated with partners and stakeholders to ensure needs were met.

- Continued integration of Corps dredging, sediment, and monitoring related databases to provide data access and tools to assist in the management of sediment and dredging information, project information, etc. providing the capability to identify needs and opportunities to implement sediment management strategies.

- Established Nearshore Berm POCs and identified Corps challenges in placing material in nearshore berms. Expanded knowledge to assist in addressing Corps challenges. Enhanced

guidance to assist in the planning, design, construction, and monitoring of nearshore berms. Initiated modification of existing numerical modeling capabilities to provide tools to assist in the evaluation of nearshore berms for improved sediment management. Expansion of these capabilities to fine-grained sediments was initiated.

- Enhanced the Sediment Budget Analysis System for web-based access and data management through enterprise databases. Established Regional Sediment Budget Repository to provide a compilation, visualization, and access to Districts regional and local sediment budgets. Enhanced existing tools for developing regional sediments budgets.

- Completed sediment budgets for Lake Erie, Lake Ontario. This effort provides an understanding of the shoreline processes in order to project future conditions with predictive models and evaluate proposed alternatives to seek comprehensive solutions that meet the needs of partners and stakeholders. This improves USACE ability to forecast and plan for dredging needs within federal navigation channels; evaluate the effectiveness and efficiency of current and future dredging and placement activities; and evaluate historic changes and alternative plans to protect and restore the shoreline

- Applied regional approaches along the Atlantic Intercoastal Waterway and shoreline in the reach encompassing St. Johns, Duval, and Nassau Counties, FL to coordinate several Federal navigation and shore protection projects. Efforts were directed toward bringing together individual projects and apply adaptive management practices to reduce sedimentation and optimize use of sediments cooperatively among the navigation and shore-protection projects.

- Identified and evaluated alternatives to reduce sedimentation, reduce maintenance, and increase beneficial uses along the Gulf Intracoastal Waterway in the Galveston District

- Continued coordination of opportunities for improved use of USACE shallow draft dredges to optimize the use of sediments at USACE projects. The goal was to improve sediment management, productivity, operational efficiencies, and cost effectiveness at low use projects.

SUMMARIZED FINANCIAL DATA:

Allocation for FY11	$1,963,000	
Allocation for FY12	$3,169,000	
Conference Allowance for FY13	$1,800,000	2/
Estimated Carry-In Funds	$0	
President's Budget for FY14	$1,800,000	1/

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

O&M Justification Sheet

PROJECT NAME: Reliability Models Program For Major Rehabilitation and Asset Management

AUTHORIZATION: This program is authorized by request from USACE nationwide to provide assistance when doing a major rehabilitation project

LOCATION AND DESCRIPTION: O&M Remaining Item, Nationwide. The purpose of this program is to respond to the needs of the Districts and Divisions that are preparing Major Rehabilitation Reports for the upcoming fiscal year. The objective of the program is to provide reliability models for project features or components of projects that are being considered for Major Rehabilitation, or to provide procedures that consider the impact of various chemical, environmental or physical processes in a reliability analysis.

CONFERENCE AMOUNT FOR FY 13: $ 300,000 2/
BUDGETED AMOUNT FOR FY 14: $ 300,000 1/

DESCRIPTIONS OF WORK AND JUSTIFICATIONS FOR FY 14:

N: N/A

FRM: The requested funds will be used to prepare reliability models and to collect data for reliability analyses anticipated to be required by the Districts. Reliability models and/or data are anticipated to be needed for the following: 1) Testing of a reliability model for seepage through embankment dams and levees, 2) Testing of a reliability model for floodwall stability, 3) Continued evaluation of data collected on the performance of dam gates and pretensioned anchor rods. This information will be used to determine performance modes and to verify load cycles used in a reliability analyses, 4) Continued evaluation of the impacts of electrical/mechanical systems on the reliability model for locks and dams. 5) Continued development of the reliability models for I-Wall's on levees. 6) Develop a reliability model for Concrete Dams considering seismic/dynamic loading. 7) Continued development and refinement of the reliability models for barge impact loads. This will also be extended to Inland Waterways 8) Continued determination of the human reliability factor 9) Development of s simplified Fault Tree Analysis for system reliability calculation for Navigation structures, and 10) Provide reliability analysis procedures for additional selected hydropower equipment. It is also anticipated that two rehabilitation workshops would be conducted. The makeup of these workshops will be determined based on the needs of the respective Districts and Divisions. Continue to provide support and consultation for development of reliability models for Asset Management for Navigation and Flood/Coastal business project lines. Continue to incorporate reliability into existing computer programs

RC: N/A

H: N/A

EN: N/A

WS: N/A

OTHER INFORMATION: Many reliability models and other analytical tools have been provided in support of the Major Rehabilitation Program. Reports on numerous navigation and hydropower projects have been accomplished. In addition, 20 rehabilitation workshops have been conducted in the last 16 years to assist the Districts as they prepare their Major Rehabilitation Reports.

These workshops offer guidance in conducting reliability and risk analyses, and provide the opportunity for interdisciplinary teams from the Districts and Divisions to discuss their particular project with HQUSACE and other Districts/Divisions personnel. EM 6062, Risk and Reliability for Major Rehabilitation Studies was published. Barge Impact numerical modeling techniques have been extended to Inland Waterways. Reliability capability has been added to the Pile Group Computer Program and the Sheetpile Wall Design Computer Program. A Concrete Deterioration model for Lock Walls and the subsequent economic consequences was finalized. This model will be applied lock walls to aid in the Major Rehab Program justification. Many rehabilitation workshops have been conducted. Expert Elicitation has been conducted for the mechanical and electrical systems for navigation locks. Also, have provided consultation and review in the development of reliability models for major maintenance (as part of asset management).

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2013 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Water Operations Technical Support (WOTS)

Allocation for FY 2013	$500,000 2/
Allocation Requested for FY 2014	$500,000 1/

AUTHORIZATION: These efforts are necessary to provide support for the restoration and management of Federal water resources.

JUSTIFICATION: Maintaining the high quality environmental and water quality conditions at 562 Corps reservoirs (5,500,000 surface acres), 237 navigation locks, 926 harbors, 75 hydropower projects, and 25,000 miles of inland and coastal waterways requires compliance with numerous statutes and state standards. Providing the technology and knowledge base necessary to broadly address environmental requirements in accordance with laws and regulations can best be accomplished through a comprehensive centralized program that will maximize cost effectiveness, and ensure broad dissemination and implementation of technology and information.

PROPOSED ACTIVITIES FOR FY 2014: The WOTS Program is expanding as environmental conditions at Corps project sites continue to deteriorate. The program will continue to provide effective environmental and water quality management technologies to address a wide range of issues at Corps reservoir and waterway projects, and in river systems nationwide. The program will provide technology to address: problems caused by aquatic invasive species; water quality impacts of land use, sediment and nutrient loadings, erosion, and reservoir sedimentation; tailwater fisheries concerns at pump-back hydropower projects; and project operations related to environmental and water quality issues. WOTS will provide technical support to the Corps' mission related project responsibilities, with special emphasis on the transfer of technology. The program will ensure that the technologies developed by the Corps and other Federal agencies are current and readily available to all Corps field offices. The effective use of technologies will be secured through direct technical assistance, specialty workshops, information bulletins, technical notes, executive notes, technical reports, miscellaneous papers, instruction manuals, videos, meetings, seminars, briefings, congressional testimony, and the Internet.

ACCOMPLISHMENTS FOR FY 2013:

- The program continued to provide effective environmental and water quality management technologies addressing a wide range of issues at Corps reservoir and waterway projects, and in river systems nationwide.

- The program provided technology addressing: problems caused by aquatic invasive species; water quality impacts of landuse, sediment and nutrient loadings, erosion, and reservoir sedimentation; tailwater fisheries concerns at pump-back hydropower projects; and project operations related to environmental and water quality issues.

- WOTS provided technical support to the Corps' mission related project responsibilities, with special emphasis on the transfer of technology. The program ensured that the technologies developed by the Corps and other Federal agencies are current and readily available to all Corps field offices.

- The effective use of technologies were secured through direct technical assistance, specialty workshops, information bulletins, technical notes, executive notes, technical reports, miscellaneous papers, instruction manuals, videos, meetings, seminars, briefings, congressional testimony, and the Internet.

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year 2014 from prior appropriations for use on this effort is $ 0. This amount will be used to perform work on the study as follows: N/A

2/ At the time this J-sheet was prepared, the Army Corps had not yet developed an operating plan for the remainder of fiscal year 2013.

Criteria

Corps of Engineers
FY 2014 Construction Performance Guidelines

To qualify, a project must be authorized for construction; have an approved Chief's report, major rehabilitation report, or Dam Safety modification report; and, where applicable, successfully completed review under Executive Order 12322.

- Project Purpose – Ongoing construction projects, including those funded in the Mississippi River and Tributaries account, are assigned based on their primary purpose to one of the three main mission areas of the Corps (flood and storm damage reduction, commercial navigation, and aquatic ecosystem restoration) or to hydropower.

- Projects funded to address dam safety assurance, seepage control, and static instability correction problems – Projects that are funded for construction to address a dam safety action classification 1 or 2 concern will receive the maximum level of funding that the Corps can efficiently and effectively spend each year.

- Projects funded on the basis of their economic return – Ongoing construction projects that are funded based on their economic return and have a benefit-to-cost ratio (BCR) of 2.5 to 1 or higher, calculated at a seven percent discount rate, are eligible for funding. Projects with a BCR below this threshold will not be funded unless they are eligible for funding under other criteria of these guidelines.

- Projects funded on the basis of their environmental return – Ongoing construction projects to restore degraded ecosystem structure, function, and process to a more natural condition are eligible for funding.

- Projects funded to address a significant risk to human safety – Flood and storm damage reduction projects that are funded to address a significant risk to human safety will receive funding to support an uninterrupted effort.

- New starts and resumptions – The start of a priority new construction project, and the resumption of work on a priority construction project, will be eligible for funding.

- Mitigation or environmental requirements – Mitigation work at ongoing construction projects, and work needed to comply with treaties or biological opinions, will be funded to meet those requirements.

- Non-structural flood damage reduction projects – Ongoing non-structural flood damage reduction projects will be eligible for funding if the project has a BCR of 1.0 to 1 or above, at a seven percent discount rate.

- Dredged Material Disposal Facility (DMDFs) for high and moderate use segments of commercial deep draft, shallow draft, and inland projects which are no longer included in O&M and should be budgeted under Construction.

- Qualifying Continuing Projects with Continuing Contracts – Projects under the original continuing contract clause.

- Coastal navigation projects – Consistent with guidance provided in the Statement of Managers accompanying the 2012 Energy and Water Development Appropriations Act, ongoing coastal navigation projects will be eligible for funding to the extent that completion of the project, separable element, or project phase would support jobs or economic activity.

- Project completions – Ongoing projects that can complete all remaining construction work during the budget year may be funded at the level needed to complete that work if the project has a BCR of 1.0 to 1 or above, at a seven percent discount rate.

Corps of Engineers
FY 2014 Operation and Maintenance (O&M) Performance Guidelines

The Corps uses objective performance-based criteria to allocate operation and maintenance funds to Corps projects. These criteria give priority to key infrastructure and consider the condition of the project and the potential consequences (e.g., economic, environmental, and public safety impacts) for project performance if the O&M activity is not undertaken in the budget year, as well as legal factors. The criteria, with an explanation of how the Corps applies them, are provided below:

- Project Purpose – Each proposed O&M activity at all projects that the Corps operates and maintains, including those funded in the Mississippi River and Tributaries account, is assigned to one of six program areas: commercial navigation, flood and storm damage reduction, environment, recreation, hydropower and water supply. For projects with multiple purposes, the separable activities are assigned to the program area that they serve. Joint activities are allocated among all program areas served by the project based upon a project-specific allocation formula.

- Economic Impacts – The benefits that will be accrued for the dollars spent to improve the level of service are considered during the evaluation. For O&M funding decisions, an informed judgment is made using performance data to estimate the economic impact of the activity. Those with a higher return on investment receive a higher priority in the budget process. For example, the evaluation for commercial navigation includes the current and five-year average tonnage (coastal) and ton-miles (inland waterways), cost per ton and cost per ton-miles, as well as other factors such as support for commercial fishing or public transportation (passenger ferries). For flood and storm damage reduction, it includes the risk of loss of life or property; for recreation, it includes visitor attendance; and for hydropower, the risk of facility closure.

- Asset Management – Reliability of projects is evaluated to determine a project's ability to adequately perform its intended function in a consistent and dependable manner when field conditions allow. Condition classification guidelines are used to determine overall project condition, with component condition assessments performed to evaluate the condition of individual critical components. Consequence rating criteria are used to determine the impact (dollars, lives, etc.) of reduced availability. The results of the condition and consequence evaluations lead to a risk level based on an established matrix for each program area. The risk of not funding the proposed work is evaluated in the budget year in terms of the intended function. Cost-effectiveness measures are used to determine the lowest cost solution to improve the overall reliability of the project. These results incorporate both economic and public safety values, as well as any residual risk, which are used to help with project reliability determinations, based on those specific performance measures.

- Public Safety – Public safety is also a factor used in ranking O&M activities. A proposed work package is given greater consideration if its purpose is to reduce the risk of a failure that could result in loss of life. For commercial navigation, other factors include whether the harbor is a critical harbor of refuge, supports a subsistence harbor or supports other Federal requirements such as the U.S. Coast Guard search and rescue or national security requirements.

- Environment and Stewardship Concerns – O&M work to address a significant environmental concern is evaluated based on its environmental return (benefits per funding amount). Those O&M activities that reduce the risk of significant adverse environmental or cultural resource impacts are given a higher consideration for funding.

- Legal Requirements – Projects with O&M-related legal requirements are also given a higher consideration for funding, e.g., projects with requirements to address Indian tribal rights or whose operation involves ongoing mitigation needs.