

**Department of the Army
U.S. Army Corps of Engineers Civil Works
Program
Five-Year Development Plan**

Fiscal Year 2010 to Fiscal Year 2014



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Executive Summary

This Five-Year Development Plan (FYDP) places the Fiscal Year (FY) 2010 budget into a longer term context. This context is important because most United States Army Corps of Engineers (USACE) studies build off the previous year's budget and require multi-year investments. This report presents projections of discretionary budget authority for the Army Civil Works program for FY10 through FY14. Two funding scenarios are presented: A Base Plan Scenario and an Enhanced Plan Scenario. The Base Plan consists of the President's FY10 budget and its out-year funding stream. The Enhanced Plan is derived from the FY09 appropriation and a growth rate necessary to assure constant purchasing power. The base plan ranges from \$5.17 billion in FY10 to \$5.5 billion in FY14. The enhanced plan ranges from \$5.4 billion in F109 to \$6.25 billion in FY14.

There are three main sections in this report:

1) Introduction: This section describes the eight Civil Works funding accounts: Investigations; Construction; Operation and Maintenance; Mississippi River and Tributaries (MR&T); the Regulatory Program; Formerly Utilized Sites Remedial Action Program (FUSRAP); Flood Control and Coastal Emergencies (FCCE), and Expenses.

These funding accounts support eight business programs, plus the oversight, executive direction and management function. The eight programs are: Navigation, Flood Risk Management, Environment, Recreation, Hydropower, Water Supply, Emergency Management, and the Regulatory program. These programs are influenced by various Corp-wide initiatives such as the Strategic Direction (in both the Campaign Plan and the Civil Works Strategic Plan) and Actions for Change.

2) Business Program Summaries: For each business program, the report discusses accomplishments, future challenges, project spotlights and the business program's funding and performance under the historical, base, and enhanced funding. The Civil Works Strategic Goals, Objectives, and Strategic Direction impact program and project priorities. The report describes the performance objectives that influence each business program under the two funding scenarios.

This document attempts to relate performance and budgets. With base funding, the programs cannot keep up with inflation. This creates problems with maintaining the FY10 performance. Activities are eliminated or reduced to fit the budget. The enhanced budget allows most programs to maintain the status quo and to continue with improvement.

The three largest funded programs are: Navigation, Flood Risk Management, and Environment. Navigation receives the largest portion of funding, between 32 and 34 percent of base funding during the five year period. Flood Risk Management receives 24 to 32 percent of base funding. Navigation, Flood Risk Management, and Hydropower are facing similar circumstances, are

dealing with aging infrastructure. The programs are undertaking risk assessments to prioritize activities and manage infrastructure.

Environment receives between 12 and 15 percent and is broken into Aquatic Ecosystem Restoration, Environmental Stewardship, and Formerly Utilized Sites Remedial Action Program (FUSRAP). The Aquatic Ecosystem Program is the newest addition to Civil Works Program. The South Florida Everglades Ecosystem Project is the largest funded construction project in the environment program. The Louisiana Coastal Area Ecosystem Restoration Project is the largest investigation study; however, in the out-years, funding will be necessary to implement study recommendations.

3) Appendix: The appendix contains more detailed tables. Projects and projected funding levels are listed for both the Base and Enhanced Scenarios. The projects are broken down by state in separate tables by Investigations, Construction, and Mississippi River and Tributaries. Finally, the Appendix also includes a table illustrating the ongoing projects in the Continuing Authorities Program.

Introduction

USACE is moving forward . . .

In this new Five-Year Development Plan, strategy will shape the Army Civil Works budget. This document forges a stronger connection between: 1) strategic thinking and planning, as revealed in the Fiscal Year 2004 to 2009 Civil Works Strategic Plan and continued in the proposed 2009 to 2014 version; and 2) the execution of our program, as described and detailed in the FY10 through FY14 programs. The near-term decisions embodied here will be made within a framework that includes long-term goals and aspirations. USACE will use strategies to inform and shape the budget and the business of USACE.

Vision

A great engineering force of highly dedicated people working with our partners through disciplined thought and action to deliver innovative and sustainable solutions to the Nation's water resources planning, engineering, construction, and operations challenges.

USACEs [vision](#) builds on the bold initiative introduced in the last strategic plan to promote a holistic, system approach to defining and solving America's water resources problems in collaboration with a large community of water resources stakeholders. This [vision](#) leads to setting strategic goals and objectives. The strategic goals were derived from balancing input listening sessions, USACE priority missions and resource constraints.

Mission

It is the [mission](#) of USACE Civil Works Program to:

Contribute to the national welfare and serve the public by providing the Nation and the Army with quality and responsive:

- *Development and management of the Nation's water resources;*
- *Protection and management of the natural environment;*
- *Restoration of aquatic ecosystems;*
- *Flood risk and emergency management; and*
- *Engineering and technical services*

...in an environmentally sustainable, economic, and technically sound manner with a focus on public safety and collaborative partnerships..

This Civil Works mission is accomplished through the accomplishment of four goals.

Strategic Goals

- 1. Ensure safe and resilient communities and infrastructure.*
- 2. Promote sustainable water resources, marine transportation systems and healthy aquatic ecosystems.*
- 3. Implement effective, reliable, and adaptive life-cycle project performance.*
- 4. Build and sustain a competent team.*

To achieve these goals the Civil Works program is implemented through eight business areas representing the diversity of the Nation's resource requirements.

- Navigation
- Flood Risk Management
- Environment
- Hydropower
- Regulatory
- Recreation
- Emergency Management
- Storage for water supply

While these business areas provide a framework for executing the Civil Works program, the associated Civil Works activities transcend individual business programs and often produce multiple water resource benefits for the Nation. Consequently, close coordination between the business programs is required to deliver quality, timely products and services. The eight business program managers continually seek comprehensive, collaborative, and sustainable solutions that often involve multiple business programs.

Strategic Objectives

The Civil Works Strategic Objectives flow from each of these Strategic Goals:

❖ **Objectives for Goal 1:**

- 1.1 Be ready, responsive, and reliable in delivering high-performance, all-hazards response recovery.
- 1.2 Improve the safety and security of water resources infrastructure.

❖ **Objectives for Goal 2:**

- 2.1 Invest in economically and environmentally justified and socially acceptable water resources solutions.
- 2.2 Implement integrated and collaborative approaches to effectively solve water resource problems.
- 2.3 Implement streamlined and transparent regulatory processes to sustain aquatic resources.
- 2.4 De-authorize projects that no longer have positive benefits or a cost-sharing partner.
- 2.5 Assist in a cost-effective manner in the clean-up of contaminated hazardous, toxic, and radioactive waste sites as authorized or requested by others under the Formerly Utilized Sites Remedial Action Program (FUSRAP).

❖ **Objectives for Goal 3:**

- 3.1 Improve the efficiency and effectiveness of existing USACE water resources projects.
- 3.2 Increase the reliability of infrastructure using a risk-informed asset management strategy.
- 3.3 Develop and apply innovative approaches to delivering quality infrastructure.

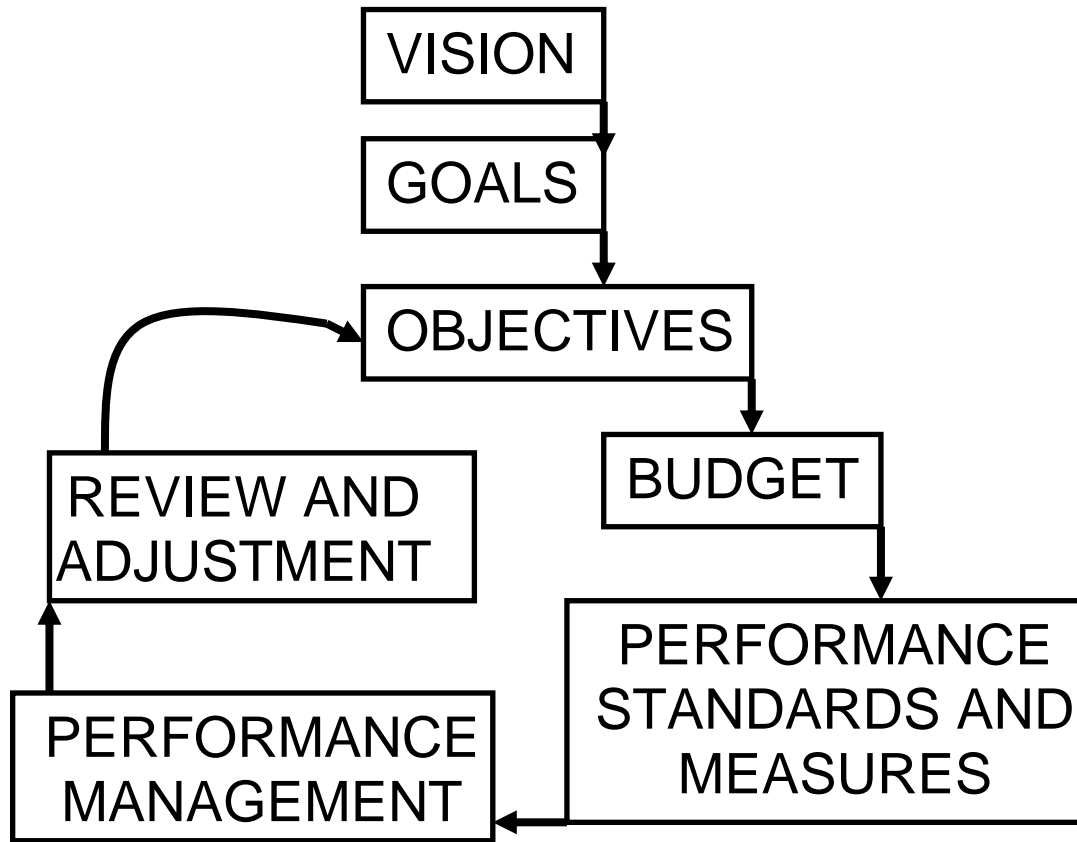
❖ **Objectives for Goal 4:**

- 4.1 Identify, develop, maintain, and strengthen technical competencies in selected Communities of Practice (CoP).
- 4.2 Communicate strategically and transparently.
- 4.3 Standardize business processes.
- 4.4 Establish tools and systems to get the right people in the right jobs then develop and retain this highly skilled work force.

The Civil Works strategic objectives describe how USACE will meet its mission requirements in a changing future environment. The [strategic goals and objectives](#) directly apply to several business programs and influence all others. Furthermore, each business program breaks these down and defines unique performance objectives and goals. Performance Measures are the business programs' performance objectives and budget effectiveness.

For example, the Environment Program specified “[Strategic Objective 2.1.1](#): *Invest in restoration projects or features that make a positive contribution to the Nation’s environmental resources in a cost-effective manner.*” This program’s main performance measure is the restoration of damages to critical ecosystems. Other performance measures such as ‘net economic benefits’, ‘presence of dam safety, seepage, or static instability problems’, ‘risk index’, ‘presence of outputs from other

business programs’; and ‘watershed management principles included in project formulation’ correlate with the program’s and USACE’s mission, vision, goals and objectives.



The Relationship between the Strategic Framework, Budgeting and Performance Management

Crossovers among business programs increase the budget and performance complexity. Most programs affect aspects of other programs. For example, a navigation lock and dam could provide hydropower, water supply, and recreation. The Flood Risk Management program could manage a flood storage reservoir that may also provide storage for water supply. The emergency management program prepares to protect levees threatened by extreme events, as well as to repair damages caused by such events. USACE has recognized these co-dependencies between programs and attempts to set objectives, plan and budget accordingly.

Past Performance Reviews Have Led to USACE Directional Changes

USACE reviews its performance and appropriations each year and considers necessary adjustments to future budgets and practices for each program and for the organization as a whole. Often, this review leads to adjustments that can be easily applied in the next year. Occasionally, annual performance problems lead to considering new Strategic Objectives for the next Strategic Plan. At other times, major short-term and long term management changes are demanded. USACE is learning, and evolving to better meet its missions.

Integrated Water Resources Management

A holistic focus on water resource challenges and opportunities that reflects coordinated development and management of water, land and related resources while maximizing economic services and environmental quality and ensuring public safety while providing for the sustainability of vital ecosystems. In FY10 USACE will initiate the development of policy guidance regarding public access to: water quality and water management data; data on permits issued and initiate the development of tools and processes for pulling water control data into a central database.

Climate Change

Changing conditions make it prudent to periodically re-evaluate the performance of the Nation's infrastructure. Changing temperatures are already driving observable changes in hydrology in regions of the country that could potentially increase the vulnerability of water resources projects. Many USACE projects were built decades ago based on a limited hydrologic record. The operation and performance of these projects should be re-evaluated based on new information to evaluate their resilience to expected future changes. FY09 activities included a joint interagency report highlighting water management adaptations (United States Geological Survey (USGS) Circular 1331 "Climate Change and Water Resources Management: A Federal Perspective", prepared by USACE, USGS, Bureau of Reclamation (Reclamation), and National Oceanic and Atmospheric Administration (NOAA). USACE released new guidance to incorporate sea-level changes at Civil Works projects that requires coastal engineers to explicitly consider alternatives robust to multiple scenarios of climate change.

USACE is currently coordinating with the Environmental Protection Agency (EPA), NOAA, and USGS on approach to identify coastal vulnerabilities to climate change from changing sea-level and coastal storms that will lead to products providing support to Federal, state, and local agencies and the private sector. The FY10 budget will support additional interagency collaboration to evaluate how climate change may affect water resources management and coastal planning. USACE will also begin to assess the vulnerability of USACE projects to dynamic changes including climate change and variability.

Additional work could be considered for the out years. Examples are: (1) Conduct, in collaboration with the Federal agencies and other stakeholders, pilot studies in regions where there is already evidence of climate change for the highest priority projects (including Western States and Alaska). (2) Update policy and guidance to improve USACE ability to adaptively plan and manage for changing conditions.

Water Resources Priorities Study

Authorized by Section 2032 of the Water Resources Development Act of 2007 (P.L. 110-114), this investigation will result in a report that describes the Nation's vulnerability to damage from flooding, including the risk to human life safety; the risk to property; and the comparative risks faced by different regions of the United States. The report will include an assessment of the extent to which Federal programs relating to flooding in the Nation address flood risk reduction priorities; the extent to which those programs may be encouraging development and economic activities in flood prone areas; recommendations for improving those programs with respect to reducing and responding to flood risks; and proposals for implementing those recommendations. The FY10 budget provides for \$2 million for the continuation of this high-priority study.

Budgeting for Performance

Most of the business programs manage projects. USACE began project management initiatives in FY09 and are continuing them in the out years in order to improve performance. Examples include: minimizing reprogramming, reducing carry-over funds, and fully funding smaller contracts.

FYDP Budgetary Resources: Base, Enhanced and the "Wedge"

Congress provides appropriations to the USACE in the form of funding accounts (e.g. investigations, construction, operation and maintenance). The business programs draw their resources from these accounts and strive to meet their objectives by allocating funds and managing their projects. For example, the navigation program receives funds from the investigations account to pursue feasibility studies related to solving navigation problems and from the operation and maintenance account to manage waterways.

This FYDP shows the out-year business program implications of two scenarios: (1) a Base Plan that tracks FY10 President's Budget and its follow-on funding stream and (2) an Enhanced Plan consistent with the total FY09 appropriations \$5,402 and an assumed follow-on funding stream for FY10 through FY14. Under the enhanced plan, additional funds over the base scenario are allocated to business programs to apply to ongoing projects and activities. Also, the Enhanced Plan provides the opportunity for projects and activities to receive greater funding for work or to move into subsequent phases of work, by competing for a funding "wedge" as projects are completed. This FYDP identifies and tracks the wedge, but does not allocate it to the programs. Instead, each program manager identifies candidate projects for the wedge funding.

Detailed Methods and Assumptions

This section describes in detail the two scenarios presented in this Five-Year Development Plan, the Base Plan and the Enhanced Plan. In both scenarios, activities are assumed to be assigned to the same accounts as proposed for FY10. Specifically, funding for rehabilitations, compliance with the Endangered Species Act at operating projects, features to use material from maintenance dredging, and mitigation of shore impacts from Federal navigation operation and maintenance are assumed to be funded by the Operation and Maintenance account.

Base Plan

The Base Plan is based on the President's budget for FY10 and formula-driven agency funding levels for FY11 through FY14 from the Office of Management and Budget (OMB). After the budget year decisions are complete, OMB generates out-year appropriation amounts that are consistent with the President's overall targets for revenues, defense, homeland security, and non-security spending. As a result, the data for the Base Plan out-years do not represent proposed levels for the agency accounts, or programs. Rather, the out-year numbers are formula-generated placeholders, pending budget decisions in future years.

Under the Base Plan, each account would maintain the same percentage of total funding in each of the out-years that it has in the FY10 budget. For example, the Investigations account is 1.95 percent of the total in the FY10 budget, so it would be 1.95 percent of the total in each out-year. Table 1 displays the total and the amount for each appropriations account from FY10 thru FY14 for the Base Plan.

Table 1: Civil Works Base Plan Appropriations Accounts by Fiscal Year (\$ Millions)

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Account:					
Investigations	100	101	101	103	107
Construction	1,718	1,743	1,743	1,777	1,844
Operation and Maintenance (O&M)	2,504	2,541	2,541	2,590	2,687
Mississippi River and Tributaries (MR&T)	248	252	252	256	266
Formerly Utilized sites Remedial Action Program (FUSRAP)	134	136	136	139	144
Regulatory Program	190	193	193	196	204
Flood Control and Coastal Emergencies (FCCE)	41	42	42	42	44
Executive Direction and Management	184	187	187	190	197
Assistant Secretary of the Army (Civil Works)	6	6	6	6	6
Total, Discretionary Budget Authority	\$ 5,125	\$ 5,200	\$ 5,200	\$ 5,300	\$ 5,500

Expenses and Office of the Assistant Secretary of the Army (Civil Works), (ASA(CW))

Expenses and ASA(CW) accounts fund USACE executive direction and management, and Army Secretarial oversight of the Civil Works program. USACE's executive direction covers the headquarters and division expenses. These accounts are not allocated to business programs. The ASA(CW) amount is part of the Army Civil Works FY10 budget; however, the office is treated as the Department of Defense.

The following table displays the funding allocation among business programs.

Table 2: Civil Works Base Plan Programs by Fiscal Year
(\$ Millions)

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
<i>Business Program:</i>					
Navigation	1,766	1,748	1,711	1,710	1,751
Flood Risk Management (FRM)	1,628	1,546	1,444	1,372	1,338
Aquatic Ecosystem Restoration	546	516	486	443	400
Environmental Stewardship	99	100	100	102	106
Formerly Utilized sites Remedial Action (FUSRAP) Program	134	136	136	139	144
Hydropower	230	230	226	227	233
Recreation	283	287	287	293	304
Water Supply	4	4	4	4	4
Regulatory	190	193	193	196	204
Emergency Management	55	56	56	57	59
Executive Direction and Management	184	187	187	190	197
Army Secretarial Oversight	6	6	6	6	6
Other (Additional studies, projects, programs, and activities, known as the "wedge")	0	191	364	561	754
Total	\$ 5,125	\$ 5,200	\$ 5,200	\$ 5,300	\$ 5,500

The "wedge" refers to funding made available by completed projects. The "wedge" is not allocated to business programs; however, in a subsequent section, each business program provides examples of how these funds could be used. In the table above, business lines appear to be decreasing in some of the out years due to the wedge which for purposes of this document, remains unassigned. Under the base plan, the projects included in the FY2010 President's budget are funded in the out-years at the same level as in the budget. The wedge is then made up of the funds that become available as projects and studies are completed and funds are not required for these purposes in latter out-years. In addition funds are available due to the slightly larger appropriation in each account for each out-year (Investigations, Construction and Mississippi River and Tributaries).

Table 3 shows how the Business Programs draw funds from the various accounts in FY10 Base Scenario. For example, the \$1.8 billion Navigation Program draws \$19 million from investigations, \$288 million from construction, \$1.411 billion from operation and maintenance (O&M), and \$48 million from the Mississippi River and Tributaries accounts. Similar data was used for the formulation of business program funding in each out-year and scenario.

**Table 3: FY10 Base Business Program and Account Summary
(\$ Millions)**

	Investigations	Construction	O&M	MR&T Sub-Total	FUSRAP	FCCE	Regulatory	Expenses	ASA	Total
Business Program:										
Navigation	\$19	\$288	\$1,411	\$48						\$1,766
Flood Risk Management (Flood and Coastal Damage Reduction)	\$37	\$919	\$497	\$174						\$1,627
Aquatic Ecosystem Restoration	\$44	\$481	\$17	\$5						\$547
Environmental Stewardship			\$94	\$5						\$99
Formerly Utilized Sites Remedial Action (FUSRAP) Program					\$134					\$134
Hydropower		\$30	\$200							\$230
Recreation			\$267	\$16						\$283
Water Supply			\$4							\$4
Regulatory							\$190			\$190
Emergency Management			\$14			\$41				\$55
Executive Direction and Management								\$184		\$184
Assistant Secretary of the Army (ASA Civil Works)									\$6	\$6
TOTAL	\$100	\$1,718	\$2,504	\$248	\$134	\$41	\$190	\$184	\$6	\$5,125

Enhanced Plan

For the Enhanced Plan, the overall funding levels for FY10 through FY14 adjust the FY09 Appropriations overall funding level of \$5.402 billion (including the Assistant Secretary and Expenses) for projected changes in the Gross Domestic Product (GDP) price index. Consistent with the base scenario, Expenses and the Assistant Secretary accounts are not allocated to the business programs. The funding allocation is permitted to vary from the FY10 account mix. However, no account receives less funding in the FY10 Enhanced Plan than it does in the FY10 budget.

FY10 Appropriation Account Funding under the Enhanced Plan is distributed as follows:

- The Operation and Maintenance account receives funding above the FY10 budget amount to address priority maintenance. The O&M account received \$2.7 billion in FY10, an increase of \$200 million over the FY10 budget amount for the O&M account.
- Investigations receives \$186 million in FY10, \$86 million above the FY10 budget amount.
- Construction receives \$1.830 billion in FY10, \$112 million above the FY10 budget amount.
- The Formerly Utilized Sites Remedial Action Program (FUSRAP) account receives \$144 million in FY10. This is \$10 million above the FY10 budget amount.
- The Expenses account receives \$190 million in FY10, which is \$6 million above the FY10 budget amount.
- The Regulatory Account receives \$210 million in FY10, or \$20 million above the FY10 budget amount.
- The Flood Control and Coastal Emergencies account would receive \$80 million, \$39 million above the FY10 budget amount.
- MR&T receives \$248 million, the same as in the FY10 budget.

Out-years Appropriation Funding under the Enhanced Plan is distributed as follows:

In the out-years, funding for each account generally increases from the FY10 level with the GDP price index. This is just under three percent per year. However, the O&M account and the Maintenance portion of the MR&T account increase three percent per year in recognition of the aging of the Civil Works capital assets until 2013, when all accounts increase at least 3 percent or more. As an offset, the Construction account and the Construction portion of the MR&T account only increases slightly each year.

Table 4 displays the overall total and the total for each account in each fiscal year from FY10 through FY14 under the Enhanced Plan.

**Table 4: Civil Works Enhanced Plan Appropriations Accounts by Fiscal Year
(\$ Millions)**

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Account:					
<i>Gross Domestic Product Price Index</i>	126	127	129	132	134
Investigations	186	191	197	203	210
Construction	1,830	1,872	1,924	1,986	2,053
Operation and Maintenance (O&M)	2,648	2,727	2,809	2,899	2,997
Flood Control, Mississippi River and Tributaries (MR&T)	248	255	262	270	280
Formerly Utilized Sites Remedial Action Program (FUSRAP)	144	148	152	157	162
Regulatory Program	210	216	222	229	237
Flood Control and Coastal Emergencies (FCCE)	80	82	85	87	90
Expenses	190	195	201	207	214
Assistant Secretary of the Army (Civil Works)	6	6	6	7	7
Total, Discretionary Budget Authority	\$ 5,542	\$ 5,692	\$ 5,857	\$ 6,045	\$ 6,250

Table 5 displays the business program funding. The “wedge” refers to funding made available by completed projects. The “wedge” is not allocated to business programs; however, in a subsequent section, each business program provides examples of how these funds could be used. Under the enhanced plan, the projects included in the FY2010 President’s budget are funded in the out-years at the project’s capability level. The wedge is then made up of the funds available as projects and studies complete in addition to the slightly larger appropriation in each account (Investigations, Construction and Mississippi River and Tributaries). The wedge is smaller in the enhanced plan as the projects are able to receive funding as required, as opposed to being held constant at FY2010 levels.

**Table 5: Civil Works Enhanced Plan Business Programs by Fiscal Year
(\$ Millions)**

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
<i>Business Program:</i>					
Navigation	1,980	2,032	2,090	2,149	2,171
Flood and Coastal Storm Damage Reduction (FCSDR)	1,688	1,728	1,771	1,807	1,715
Aquatic Ecosystem Restoration	542	551	599	561	555
Environmental Stewardship	98	101	104	107	111
Formerly Utilized sites Remedial Action (FUSRAP) Program	144	148	152	157	162
Hydropower	260	271	279	287	293
Recreation	283	287	295	305	315
Water Supply	4	4	4	4	4
Regulatory	210	216	222	229	274
Emergency Management	93	96	100	104	108
Executive Direction and Management	190	195	201	207	214
Army Secretarial Oversight	6	6	6	7	7
Other (Additional studies, projects, programs, and activities, "wedge")	44	57	74	121	358
Total	\$ 5,542	\$ 5,692	\$ 5,857	\$ 6,045	\$ 6,250

Table 6 shows the distribution of Enhanced Plan funds to the Business Programs for FY10. For example, in FY10, Navigation receives \$2 billion which is \$243 million above the base.

**Table 6: FY10 Enhanced Business Program and Account Summary
(\$ Millions)**

	Investigations	Construction	O&M	MR&T Sub-Total	FUSRAP	FCCE	Regulatory	Expenses	ASA	Wedge	Total
Business Program:											
Navigation Flood Risk Management (Flood and Coastal Damage Reduction)	\$40	\$363	\$1,530	\$47							\$1,980
Aquatic Ecosystem Restoration	\$85	\$927	\$503	\$173							\$1,688
Environmental Stewardship Formerly Utilized Sites Remedial Action (FUSRAP) Program	\$60	\$465	\$12	\$5							\$542
Hydropower Recreation			\$93	\$5							\$98
Water Supply					\$144						\$144
Regulatory Emergency Management		\$63	\$197	\$15							\$260
Executive Direction and Management Assistant Secretary of the Army (ASA Civil Works)			\$268	\$4							\$283
Wedge			\$4				\$210				\$4
TOTAL			\$13			\$80					\$93
								\$190			\$190
									\$6		\$6
										44	44
TOTAL	\$185	\$1,818	\$2,619	\$245	\$144	\$80	\$210	\$190	\$6	44	\$5,542

Under the Base Plan there is no “wedge” in FY10, but there is a “wedge” in the out-years. The Enhanced Plan shows a “wedge” for all years. In both cases, the “wedge” is not allocated across business programs.

Business Program Summary

NAVIGATION

The navigation program is responsible for providing safe, reliable, efficient and environmentally sustainable waterborne transportation systems for the movement of commercial goods and for national security needs. The program seeks to meet this responsibility through a combination of capital improvements and the operation and maintenance of existing infrastructure projects. The navigation program is vital to the nation's economic prosperity: 75 percent of America's overseas international trade moves through its ports. The nation's marine transportation system (MTS) encompasses a network of navigable channels, waterways and infrastructure maintained by the USACE, as well as publicly- and privately-owned vessels, marine terminals, intermodal connections, shipyards and repair facilities. The MTS consists of approximately 12,000 miles of inland and intracoastal waterways; approximately 350 coastal, Great Lakes and inland harbors; and channel projects comprising 13,000 miles, maintained by USACE.

FLOOD RISK MANAGEMENT

The Flood Risk Management Program is aimed at reducing risk to human safety and property damage in the event of floods and coastal storms. The civil works program has constructed 8,500 miles of levees and dikes, 383 reservoirs and more than 90 storm damage reduction projects along 240 miles of the nation's 2,700 miles of shoreline. 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 levee districts that own and operate the projects.

Over the years, USACEs' mission of addressing the causes and impacts of flooding has evolved from flood control and flood prevention and, more recently, to more comprehensive flood risk management. These changes reflect a greater appreciation for the complexity and dynamics of flood problems – the interaction of natural forces and human development – as well as the federal, state, local and individual partnerships necessary for thorough management of the risks caused by coastal storms and heavy rains.

Risk management is defined as the process of identifying, evaluating, selecting, implementing and monitoring actions taken to mitigate levels of risk. The goal of risk management is scientifically sound, cost-effective, integrated actions that reduce risks while taking into account social, cultural, environmental, ethical, political and legal considerations. The USACEs' approach to flood risk management includes collaborations with partners and stakeholders—i.e., the Federal Emergency Management Agency (FEMA), the Department of Housing and Urban Development, the NOAA, state governments, sponsors and affected citizens—that effectively and efficiently, make the nation more aware of flood risk.

The Flood Risk Management Program has compiled an impressive record of performance, yielding a six-to-one return on investment. That is, the program saves six dollars for each dollar spent. The program also has helped reduce the risk to human safety by providing timely flood warnings that provide time for evacuation.

ENVIRONMENT

The Environmental Program includes three sub-programs: Aquatic Ecosystem Restoration, Environmental Stewardship and the Formerly Utilized Sites Remediation Action Program. Each of these sub-programs has separate goals and objectives and performance measures.

ENVIRONMENTAL: AQUATIC ECOSYSTEM RESTORATION (AER)

The Army's mission in the area of aquatic ecosystem restoration is to help restore aquatic habitat to a more natural condition in ecosystems whose structures, functions and dynamic processes have become degraded. The emphasis is on restoration of nationally- or regionally-significant habitat where the solution primarily involves modifying the hydrology and geomorphology.

ENVIRONMENTAL: ENVIRONMENTAL STEWARDSHIP

The environmental stewardship program focuses on the management, conservation and preservation of natural resources on 11.5 million acres of land and water at 456 multipurpose USACE projects. Among other environmental activities, program personnel monitor water quality at USACE dams and operate fish hatcheries in cooperation with state wildlife agencies. The program includes compliance measures to ensure that USACE projects meet federal, state and local environmental requirements; prevention; and conservation.

ENVIRONMENTAL: FORMERLY UTILIZED SITES REMEDIATION ASSISTANCE PROGRAM (FUSRAP)

Under the FUSRAP, USACE cleans up former Manhattan Project and Atomic Energy Commission sites, making use of expertise gained in cleaning up former military sites and civilian hazardous waste sites under the Environmental Protection Agency Superfund program.

HYDROPOWER

USACEs' multipurpose authorities provide hydroelectric power as an additional benefit of projects built for navigation and flood control. USACE is the largest owner-operator of hydroelectric power plants in the United States and one of the largest in the world. USACE operates 350 generating units at 75 multipurpose reservoirs, mostly in the Pacific Northwest; they account for about 24 percent of America's hydroelectric power and approximately 3 percent of the country's total electric-generating capacity. Its hydroelectric plants produce nearly 70 billion kilowatt-hours each year—sufficient to serve about 75 million households equal to 288 cities the size of Washington, DC. Hydropower is a renewable source of energy and one of the least environmentally disruptive sources of electric power, producing none of the airborne emissions that contribute to acid rain or the greenhouse effect.

RECREATION

USACE is an important provider of outdoor recreation, which is an ancillary benefit of its flood damage reduction and navigation projects. USACE' recreation program provides quality outdoor public recreation experiences in accordance with its three-part mission: 1) serve the needs of present and future generations; 2) contribute to the quality of American life; and 3) manage and conserve natural resources consistent with ecosystem management principles.

USACE administers 4,488 recreation sites at 423 projects on 12 million acres of land. During fiscal year 2008, 10 percent of the U.S. population visited a USACE project at least once. These visitors spent \$18 billion pursuing their favorite outdoor recreation activity, supporting some 350,000 full- and part-time jobs.

REGULATION OF WETLANDS AND WATERWAYS

In accordance with the Rivers and Harbors Act of 1890 (Sec. 10) and the Clean Water Act of 1972 (Sec. 404), as amended, the Army Civil Works Regulatory Program regulates the discharge of dredged and fill material into U.S. waters, including wetlands. USACE implements many of its oversight responsibilities by means of a permit process. Throughout the permit evaluation process, the USACE complies with the National Environmental Policy Act and other applicable environmental and historic preservation laws. In addition to federal statutes, USACE must also consider the views of other federal, tribal, state and local governments and agencies; interest groups as well as the general public when rendering its final permit decisions.

EMERGENCY MANAGEMENT

Throughout USACE history, the United States has relied on the civil works program for help in times of national disaster. Emergency management continues to be an important part of the civil works program that supports the Department of Homeland Security in carrying out the National Response Framework. It does this by providing emergency support in the areas of public works and engineering, and by conducting emergency response and recovery activities under authority of Public Law 84-99. USACE responds to more than 30 presidential disaster declarations in a typical year, and its highly-trained workforce is prepared to deal with both man-made and natural disasters.

Hurricanes Katrina, Rita, Wilma and Ophelia caused significant damage to the flood and hurricane protection projects along the Gulf Coast and South Atlantic states. Hurricane Katrina, alone, resulted in federal costs of approximately \$125 billion in Louisiana, Mississippi and Alabama. USACE costs to repair and upgrade the New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS) will be approximately \$14 billion. Major damage to the storm protection system in the New Orleans area included overtopping of 47 sections of levees and the failure of three floodwalls along Lake Pontchartrain and vicinity.

Coupled with its repair efforts, USACE began studying ways to improve hurricane protection in the vicinity of Lake Pontchartrain. USACE commissioned a Hurricane Protection Decision Chronology (HPDC) shortly after Hurricane Katrina in order to collect, record and analyze project memoranda, reports and related documentation. This material was used to better understand how complex social and political decision-making processes contributed to the

HSDRRS and how those processes might be improved. Subsequently, a report provided an explanation—as opposed to an evaluation—of the way in which USACEs’ policies and organization, legislation, financial and other factors influenced decisions that led to the HSDRRS protective structures in place when Hurricane Katrina struck.

The HPDC focus on project decision-making complemented the engineering forensics investigations conducted by the Interagency Performance Evaluation Task Force and other institutions. The HPDC’s purpose is to make predictions about the future by looking at historical data, and it demonstrated that no single individual, agency, organization or decision was solely responsible for the development of the HSDRRS over the course of its 50-year history. USACE is committed to open, transparent communication with the American public regarding the ‘lessons learned’ in the aftermath of Hurricane Katrina.

USACE not only contributes to domestic emergency management efforts, but also plays a major role on the international stage through its participation in the civil military emergency preparedness program. In support of the Department of Defense (DoD), USACE shares emergency management knowledge and expertise with U.S. Allies and partners in the former Soviet Republics and Eastern Europe. This valuable program brings together key leaders and builds relationships among nations in direct support of the National Defense Strategy.

WATER STORAGE FOR WATER SUPPLY

Conscientious management of the nation’s water supply is critical to limiting water shortages and lessening the impact of droughts. USACE has an important role in ensuring that homes, businesses and farms, nationwide, have enough water to meet their needs. USACE has the authority for water supply in connection with construction, operation and modification of federal navigation; flood damage reduction; and multipurpose projects.

EXECUTIVE DIRECTION AND MANAGEMENT (ED&M)

The Expenses Account provides for Executive Direction and Management (ED&M) of the Civil Works Program pursuant to policy guidance and oversight by the Assistant Secretary of the Army (Civil Works). This is accomplished through command and control, policy and guidance development, program management, national coordination, and quality assurance. 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. Program management is done through various levels of review such as Project Review Board (PRB) Reviews, Directorate Management Reviews (DMRs), and Command Management Reviews (CMRs). ED&M also does national coordination and collaboration with other agencies, States, local governments, and non-governmental organizations.

USACE Business Programs

Navigation



Navigation



Key Statistics

- ❖ Operates and maintains 25,000 miles of navigable channels
- ❖ Responsible for 926 deep and shallow draft harbors in 41 states.
- ❖ Operate and maintain 241 lock chambers at 195 sites
- ❖ There is 2.2 billion tons of domestic and foreign commerce carried annually on inland waterways.

Accomplishments

- Program operates and maintains diverse navigation resources including: channels and locks on inland and intracoastal waterways, commercially important ports and channels; refuge harbors to protect vessels from storms; subsistence harbors to meet community needs; locks, and smaller harbors among other assets
- Program provides numerous activities such as basic maintenance for older and/or smaller commercial locks and harbors; construction of dredged material placement sites; mitigation, dredging, and construction of beneficial use sites for dredged material

Future Challenges

- Providing an efficient and effective navigation system with limited funding and staff.
- Meeting the changing world shipping fleet needs to accommodate the wider and deeper ships being constructed. The Panama Canal is undergoing construction of new locks and deepening of its channels to be able to accommodate vessels up to 1,200 feet long, 160 feet wide, and have drafts up to 50 feet deep by 2014 (vessels using the Panama Canal are currently limited to 965 feet long, 106 feet wide, and maximum drafts of 39.5 feet). This will significantly change the vessel fleet calling on east and Gulf coast ports.
- Maintaining an inland navigation infrastructure that is on average over 50 years old with growing rehabilitation and maintenance needs.
- Depletion of the Inland Waterways Trust Fund (IWTF). Outlays have exceeded revenues since 2002 and the IWTF is essentially depleted. Funding for inland and intracoastal waterways construction and rehabilitation is provided just in time and annual appropriations are limited to annual IWTF revenues of approximately \$85 million.

- Balancing environmental values (turtles, nesting birds, turbidity, sea grasses, fish spawning, etc) with dredging and dredged material placement responsibilities.
- Obtaining/Constructing/Financing new dredged material placement sites, and finding storage capabilities to hold dredged material from channel maintenance.
- Implementing a system that consistently evaluates asset quality and deficiencies across projects in various regions to assist in making better resource decisions.
- Creating a cost-effective model to show the relative performance increase from marginal increases in program resources.
- Establishing a baseline of the physical condition of USACE Navigation assets.

Program History and Performance

The Navigation business program supports the following strategic plan goals, objectives and performance measures. The program’s strategic objectives come from Civil Works Strategic Goal 1 and Goal 3.

Strategic Objective 1.3: Reduce backlog of uncompleted, scheduled work on budgeted construction projects.

Strategic Objective 1.3.1: Deliver project benefits as quickly as possible within available resources.

Strategic Objective 3.1: Improve the efficiency and effectiveness of existing USACE water resource projects.

Strategic Objective 3.2: Address the operation and maintenance (O&M) backlog.

Performance Measures

Three categories of program performance measures support the above goals and objectives. Many of these Navigation measures were modified or added in 2007; these are noted below. Historical and future performance data for the new measures will be reported as it is collected and developed.

1) Customer Service Measures

- ❖ **Channel availability, high-use projects (coastal ports and harbors)** (shown in table below): Percent of time that high commercial-traffic navigation channels are available to commercial users.
- ❖ **Segment Availability (inland waterways)** (shown in table below): Number of instances where mechanical driven failure or shoaling results in the closure of all or part of a high or moderate commercial use segment for over 24 hours. Also closures in excess of 1 week.
- ❖ **Channel availability, high-use projects (inland waterways).** New for 2007. Percent of time that all Inland Waterways segments with high commercial activity are available when customers want to use them.

- ❖ **Percent of high use segments with “good” service level.** New for 2007. Percent of high commercial use segments with sufficient preventative maintenance to achieve a good service level. High use segments are the upper and lower Mississippi, the Illinois, Ohio and Tennessee Rivers and the GIWW.

2) Asset Management Measure

- ❖ Percent of inland waterways projects exceeding facilities condition index (FCI) standard. New for 2007. This measure assesses agency performance in meeting the goals of the President's Real Property Asset Management Initiative.

3) Program Efficiency Measures (New for 2007)

- ❖ Percent of reports recommending projects reflecting watershed principles. Percent of Chief's reports recommending projects for authorization that meet criteria for reflecting watershed principles in the recommended plan.
- ❖ Average annual benefits (present value) attributable to Preconstruction Engineering and Design (PED) work completed in current FY.
- ❖ Average annual benefits (present value) realized by construction projects completed in FY.
- ❖ High-return investments (inland waterways). Percent of funding to rehabilitate, construct or expand projects that is allocated to high-return investments.
- ❖ Percent change in funds required to complete all programmed work.
- ❖ Total O&M funds expended per segment ton-mile averaged over a five-year period, including rehabilitations
- ❖ Cost per ton. Operation and maintenance cost per ton of cargo shipped through a port.

The following table presents a summary of the program funding and performance. Performance information provided in the table is incomplete because the applicable data systems which will be used to collect the data are being deployed.

Table 1: Navigation Performance for O&M Projects

Fiscal Year	2001	2002	2003¹	2004	2005	2006	2007	2008	2009	2010
Appropriation (\$ Millions)	NA	NA	NA	NA	\$1,692	\$1,796	\$1,926	\$2,009	\$1,900	\$1,766
Segment Availability (000 hours)	NA	NA	22	22	16	17	20	30	NA	N A
Channel availability, high-use projects² (Center half of channel)	NA	NA	NA	NA	38%	35%	32%	30%	NA	NA%
Note 1: The navigation business line was realigned in FY2003; annual appropriations prior FY2004 cannot be directly compared to the appropriations in the years following the realignment.										
Note 2: Values for top 59 coastal and Great Lakes navigation projects based on tonnage. All projects included carry more than 10 million tons.										

Project Spotlight: New York and New Jersey Harbor Deepening Project



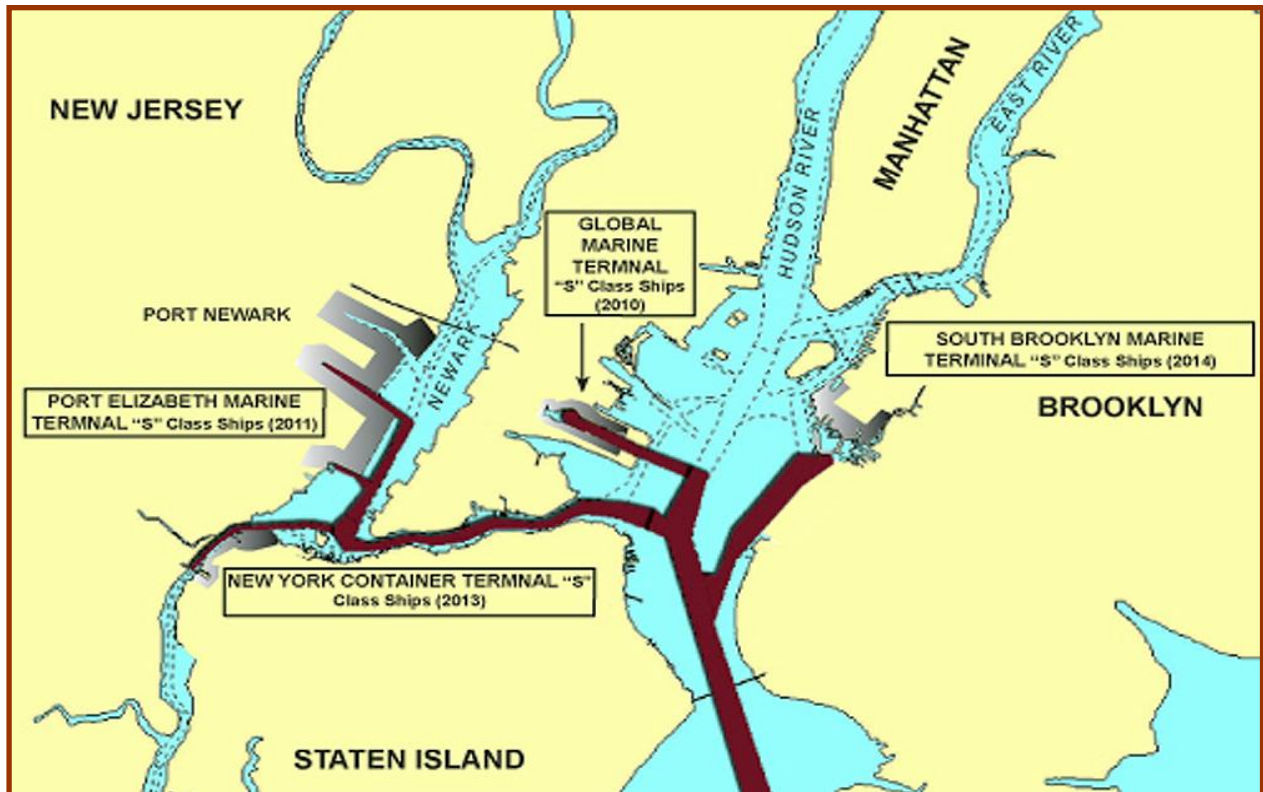
District: New York District

Location: Newark, Staten Island and Brooklyn Metro Area

Project: Deep Draft Navigation

The project deepens about 35 miles of the federal navigation channels to 50-53 foot-depths to provide larger vessel access to four major container terminals. The project includes beneficial use of dredged material, and environmental restoration to mitigate adverse environmental impacts. The port is the largest on the east coast and serves 35

percent of the American population. The port carries over 150 million tons of commerce annually. The \$2.5 billion project has a benefit-cost ratio of 2.7.



Base Funding and Performance

The Base Plan program focuses on the most critical infrastructure repairs and replacements. Constrained funding levels will not keep pace with escalating dredging and construction costs. Unscheduled closures of inland navigation locks are expected to increase, and channel availability is expected to decrease. Critical maintenance funding will keep most key navigation infrastructure functioning; however, overall facility condition will continue to decline. Channels not maintained at authorized project depths could result in light-loading of vessels (carrying less cargo to enter shallower drafts), delays waiting for higher tides, diversion to other ports, or using trucking or rail. Ongoing construction will continue at constrained levels. The highest-return studies, preconstruction engineering and designs (PEDs), and projects will be funded, and other projects may receive little or no funding.

**Table 2: Five-Year Base Plan Navigation Business Program by Account
(\$ Millions)**

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Investigations	\$ 19	\$ 19	\$ 18	\$ 18	\$ 19
Construction	\$ 288	\$ 285	\$ 279	\$ 279	\$ 286
Operation and Maintenance (O&M) Estimate	\$ 1,411	\$ 1,397	\$ 1,367	\$ 1,366	\$ 1,399
Mississippi River and Tributaries (MRT)	\$ 48	\$ 48	\$ 47	\$ 46	\$ 48
Total	\$ 1,766	\$ 1,748	\$ 1,711	\$ 1,710	\$ 1,751
Note: Includes CAP and Remaining Items					

Initiatives for Base Plan

- Support continued maintenance of high-use harbors and net exporting coastal ports, and high use inland and intracoastal waterways channels and locks.
- Continued development and implementation of a means to quantify and prioritize necessary maintenance repairs at inland navigation structures to stop the trend of increasing unscheduled lock closures
- Develop standard risk and reliability criteria to measure the condition of USACE inland waterway assets nationwide for use in establishing maintenance priorities. Risk-based condition indices will be established and populated by FY12.
- Continue Facilities Equipment Management (FEM) implementation to apply consistent maintenance standards, develop standard maintenance data and provide a means to analyze maintenance trends and unaccomplished maintenance needs on all navigation facilities equipment
- Use the standardized ‘Asset Management’ performance information in the budget decision process to optimize maintenance expenditures and improve the reliability for all large navigation structural assets
- Continue performance measures development and evaluation for inland navigation
- Continue construction of New York/New Jersey Harbor and Sacramento Deepwater Ship Channel in California.

- Continue construction of Olmsted Lock and Dam on the Ohio River in Illinois and Emsworth Locks and Dam on the Ohio River in Pennsylvania. Ongoing construction at Chickamauga Lock on the Tennessee River in Tennessee, Kentucky Lock on the Cumberland River in Tennessee, and Locks and Dams 2, 3, 4, on the Monongahela River in Pennsylvania will be curtailed in the near-term and suspended in the long-term due to the lack of IWTF revenues to finance construction.
- Complete rehabilitation of locks at Locks 27 along the Mississippi River in Illinois, and Markland Locks and Dam in Kentucky and Indiana.
- Construction and rehabilitation of ongoing inland and intracoastal waterways projects will be limited by annual IWTF revenues of approximately \$85 million. New construction or rehabilitation projects will not be undertaken until legislation is enacted to increase revenues in the IWTF.

Table 3: Five-Year Base Plan Total Budget and Performance

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Budget (\$ million)	\$1,766	\$1,748	\$1,711	\$1,710	\$1,751
Segment availability (000 hours)	30	32	34	36	38
Channel availability, high-use projects (Center half of channel)	30%	28%	26%	24%	22%

Project Spotlight: McAlpine Locks and Dam, Kentucky



The new 1,200-foot long by 110-foot wide lock chamber at McAlpine Locks and Dam was authorized by the Water Resources Development Act of 1992 and was opened in March 2009. The newest 1,200 by 110 foot lock chamber is closest to the Kentucky side (right side of picture above).

Approximately 14 to 20 tows with barges transit the McAlpine Lock daily, carrying 140,000 tons of commodities. Prior to construction, McAlpine had a 1200-foot long and a 600-foot long lock chamber. During the 1200-foot lock closures, vessels had to lock through the 600-foot lock chamber. For larger tows, this required "double locking." This process requires tows to be divided, lock a portion through, return, and lock through the remaining section of the tow. This process increases locking time from approximately one hour to approximately three hours. Having a more efficient lock system will increase the economic benefits for river traffic. Reduced time in locking can save money for industry and these savings can be passed on to consumers.

Construction began in 1996 on this multi-phase project. The 600-foot lock and the remains of the lock built in the 1870s were removed and construction began on the second 1,200-foot lock. The old bridges were removed and a high lift, fixed span bridge was built over both locks. All project features including the visitor area and new overlook, were completed in April 2009 at a cost of approximately \$430 million. The project was cost-shared with the Inland Waterways Trust Fund.

District: Louisville District

Location: Ohio River at Louisville, Kentucky

Project: Inland Navigation

Link: <http://www.lrl.usace.army.mil>

Enhanced Funding and Performance

The enhanced plan program contains funding for continuation and completion of ongoing construction projects and highest return studies. Additional dam safety assurance, seepage control, and static instability correction projects such as Lock and Dam 25 on the Mississippi River and Montgomery Lock and Dam on the Ohio River will be initiated. In addition, funding is included to accomplish high priority inland navigation infrastructure repairs to reduce the number of unscheduled lock closures and additional maintenance and dredging of coastal ports, harbors, and channels. Increased investments in inland navigation infrastructure will reduce unscheduled lock closures and increased investment in ports and channels could increase channel availability.

**Table 4: Five-Year Enhanced Plan Navigation Business Program by Account
(\$ Millions)**

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Investigations	\$ 40	\$ 41	\$ 43	\$ 44	\$ 44
Construction	\$ 363	\$ 372	\$ 383	\$ 394	\$ 398
Operation and Maintenance (O&M) Estimate	\$ 1,530	\$1,570	\$1,615	\$1,660	\$1,677
Mississippi River and Tributaries (MRT)	\$ 47	\$ 49	\$ 50	\$ 51	\$ 52
Total	\$ 1,980	\$2,032	\$2,090	\$2,149	\$2,171
Note: Includes CAP and Remaining Items					

Initiatives for Enhanced Plan

- Advance ongoing Feasibility studies and Preconstruction Engineering and Design work under the Investigations appropriation in order to complete studies and ready projects for construction.
- Advance construction of New York/New Jersey Harbor, Sacramento Deepwater Ship Channel, Mississippi River Regulating Works, and MR&T Dikes for Channel Improvements.
- Fund additional maintenance of high-use coastal ports and harbors and inland and intracoastal waterways channels and locks to increase channel availability and reduce lock closures due to mechanical failures.
- No additional work on construction or rehabilitation of ongoing inland and intracoastal waterways above the Base Plan will be performed until legislation is enacted to increase revenues in the IWTF.
- Fund additional construction of dredged material placement facilities for high use ports and harbors.
- Fund additional mitigation for sand lost as a result of construction of coastal navigation projects.

Table 5: Five-Year Enhanced Plan Budget and Performance

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Budget (\$ millions)	\$1,980	\$2,032	\$2,090	\$2,149	\$2,171
Segment availability (000 hours)	28	27	26	25	24
Channel availability, high-use projects (Center half of channel)	35%	37%	39%	41%	43%

Potential Work with “Wedge Money”

If “wedge” money for new starts was received for this business program, additional projects could be considered. While specific funding decisions would be made at that time, several examples of projects that could be considered are:

- Savannah Harbor Expansion, Georgia
- Corpus Christi Ship Channel, Texas

Flood Risk Management (FRM)



Flood Risk Management (FRM)



-Portugues Dam (under construction), Puerto Rico

Key Statistics

- ❖ Constructed 8,500 miles of levees and dikes, 383 reservoirs and more than 90 storm damage reduction projects along 240 miles of the nation's 2,700-mile shoreline.
- ❖ Most sponsoring cities and agricultural levee districts own and operate USACE constructed infrastructure
- ❖ This program accounts for almost 32 percent of FY10 civil works appropriations

Accomplishments

- The USACEs' approach to flood risk management includes collaborating with partners and stakeholders to make the nation more aware of flood risk and the roles played by all affected parties. Partners/stakeholders include the Federal Emergency Management Agency, the Department of Housing and Urban Development, the National Oceanic and Atmospheric Administration, several states, sponsors and affected citizens.
- The Flood Risk Management Program compiled an impressive record of performance, saving six dollars in damages for each dollar spent. The program also has helped reduce the number of lives lost through flood warnings that provide time for evacuation.

Future Challenges

- Constrained budgets force the allocation of resources to only the most critical activities. Local desires for assistance and willingness to cost share studies and projects are still a significant driving force for this program. While progress is occurring, there is not any programmatic assessment to identify the worst flooding problems and prioritize our response.
- In general, sponsors take over projects when USACE has completed construction. These communities need to remain vigilant in their readiness against floods, yet more frequent and common concerns often occupy the agendas of communities on a daily basis, while low frequency high importance events such as floods can be largely ignored until they are imminent. Mixed incentives among various federal programs can lead local governments or private parties to make decisions that increase flood risk exposure and liability.
- Risk communication is difficult to accomplish and sustain.
- Documentation of program performance depends upon the frequency, magnitude and location

of storms that actually occur. Continuing to provide the benefits afforded by these structures in a safe and reliable manner remains a large challenge. The effectiveness of flood damage reduction projects can be diminished by activities and phenomena outside the government's control. Changes in hydrology due to upstream development, development within floodplains, and other factors (e.g., climate change) can reduce the effectiveness of plans.

- Delayed or neglected maintenance can reduce the effectiveness of projects. Aging infrastructure also reduces project reliability. Need to continue efforts on a national programmatic assessment of projects to identify the highest risk areas with their associated consequences in the O&M programs.

Program History and Performance

The Flood Risk Management program has linked USACEs' Strategic Goal 1 and Goal 2, and the following Strategic Objectives to its business program objectives and performance measures.

Strategic Objective 1.1: Better balance economic, environmental, and quality of life objectives

- **FCSDR Strategic Objective 1.1.2:** Invest in flood and coastal damage reduction solutions when benefits exceed the costs.

Strategic Objective 1.2: Support the formulation of regional and watershed solutions to water resource problems.

Strategic Objective 3.1: Improve the efficiency and effectiveness of existing USACE water resource projects.

Strategic Objective 3.2: Address the operation and maintenance (O&M) backlog.

Performance Measures

Performance indicators currently used are: (1) flood damages prevented from actual events by existing projects (ten year moving average), (2) people protected in the flood plain by projects brought on line, and (3) annual benefits (estimated future flood damages that would be avoided) by projects brought on line.

Additional indicators were recently established that will assist USACE to determine program progress in meeting this objective. USACE began collecting performance data relating to these indicators during the Fiscal Year 2009. Preliminary baseline data has been developed and is currently being vetted within the Administration.

- ❖ **Flood damages prevented.** Measures the estimated annual dollars of property damage avoided from completed USACE flood control projects.
- ❖ **Increase in benefits realized.** This is the increase in the present value of benefits realized from construction work completed in the applicable fiscal year.

- ❖ **Additional people protected.** The increase in total affected population with reduced risk at project design attributed to completion of projects in the applicable fiscal year.
- ❖ **Operating projects in zones 21-25.** The number of operating projects (e.g., dams, levees, channels, flood gates) that are in zones 21-25 of the relative risk ranking matrix. These zones are defined in the Budget Engineering Circular EC 11-2-193 May 2008 (zones 21 to 25 are the projects in the worst condition with most adverse consequences of failure.) See Appendix III for the Condition Assessment Standards and Consequence Rating Criteria.
- ❖ **Operating projects in zones 1-6.** The number of operating projects (e.g., dams, levees, channels, flood gates) that are in zones 1-6 of the relative risk ranking matrix. These zones are defined in the Budget Engineering Circular. Zones 1 to 6 are the projects in the best condition and have the least adverse consequences of failure. See Appendix III.
- ❖ **Dam safety projects.** The percentage of the dams in the screening portfolio risk assessment (SPRA) that fall in Dam Safety Action Class (DSAC) I, II, or III.
- ❖ **Relative loss of life.** The total relative annualized loss of life per dam.
- ❖ **Dam Safety Action Classifications (DSAC) I, II, and III projects.** The number of DSAC I, II and III projects underway or completed during the applicable year.
- ❖ **Screening for Portfolio Risk Assessments (SPRA's) completed.** The number of SPRA screening level assessments completed in the applicable year.
- ❖ **Marginal cost of operations.** The marginal cost of operations and maintenance for all operating projects (e.g., dams, levees, channels, flood gates) relative to damages prevented.

The FRM business program identified performance-related indicators and ranking factors that enabled the FY 10 budgetary ranking of the relative merits of individual items of work and investment project increments.

These indicators include (but are not reported in this document):

- a. Benefit cost ratio (for PEDs and Construction)
- b. Net economic benefits
- c. Presence of dam safety, seepage, or static instability problems
- d. Number of people at risk in the 100-year flood plain (without project)
- e. Risk index (w/o project population at risk times average depth of flooding times average velocity of flooding divided by hours of warning)
- f. Presence of outputs from other business programs
- g. Percent of time available to operate as designed
- h. Cumulative operation and maintenance costs relative to cumulative economic benefits from operation and maintenance
- i. Inclusion of watershed management principles in project formulation

National flood damages, which averaged \$3.9 million annually in the 1980s, nearly doubled in the decade 1995 through 2004 despite USACE and other flood and storm damage prevention projects and programs. Total disaster assistance for both emergency response operations and subsequent long-term recovery efforts increased from an average of \$444 million during the 1980s to \$3.75 billion during the 1995 thru 2004 decade. Population migration to the coasts and development of

floodplains explains much of the apparent contradiction between investment and national flood damages.

The performance history for flood damage reduction projects is shown in the following table which reflects the fact that if there are no floods in any given year, the project’s performance cannot be measured. The only performance measures available at this time for riverine flood damage reduction projects is the annual 10-year running average of actual damages prevented. With coastal storms being less frequent, USACE does not yet have comparable data. Also performance can only be measured for completed projects.

Table 1: Flood Risk Management

Fiscal Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Appropriation (\$ Millions)	NA	NA	\$1.34	\$1.21	\$1.19	\$1.51	\$1.29	\$1.74	\$1.58
Flood Damages Prevented (\$ Millions)	\$21.90	\$23.10	\$15.70	\$22.50	\$24.00	\$9.20	\$129.8	\$180.7	NA
Note 1: Includes CAP and Remaining Items									

Project Spotlight: Antelope Creek

District: Omaha District

Location: Lincoln, Nebraska

Project: Inland Flood Damage Reduction



The \$57.2 million Antelope Creek channel improvement project will provide flood damage reduction to the city of Lincoln and the University of Nebraska at Lincoln (UNL) campus. USACE designed the channel improvement project and is managing the construction. The benefit to cost ratio is 1.3. The Antelope Creek project is being constructed in phases; the physical construction is approximately 60% complete. Phase 1 was completed in 2006, Phase 2 will be completed in 2008 and Phase 3 will be completed in 2010.

The existing Antelope Creek conduit has a capacity less than a 5-year flood event. The residential, downtown urban, and UNL city campus areas are frequently flooded beyond this event. Floods impact the City of Lincoln's major 5-laned road, downtown streets, and the UNL campus (22,000 students). The estimated federal funding needed to complete the project after 2008 is \$4.8 million.

This project is one piece of the massive Antelope Valley Project, which combines flood control, urban revitalization, and transportation projects. The entire Antelope Valley Project will cost \$238 million and take six to ten years to complete. A major roadway project, which also provides access over multiple mainline railroad tracks, is being constructed by the City of Lincoln, adjacent to, and parallel to the channel improvement project. The Multiple flood control, transportation, and urban revitalization construction projects are the result of a multi-year major investment study. The project is successfully coordinating and collaborating with numerous local, state and Federal government agencies, and other community organizations.

Base Funding and Performance

The FY10 FRM base plan program includes additional work on high performing studies, and preconstruction engineering, and design (PED), plus funding of an investigation that will result in a report that describes the Nation's vulnerability to damage from floods, including the risk to human life; the risk to property; and the comparative risks faced by different regions of the United States.

For FY10 investigations, the budget level includes continuing requirements not to exceed FY09 amounts, plus additional work on the highest performing studies and design efforts, with preference given to high performing studies that: involve communities with larger numbers of

people at risk in the flood plains, greater expected inundation damages occurring without the projects; and those with watershed-system planning potential. The five-year program also includes funds for coordination with FEMA and other critical coordination and data collection efforts.

The FRM construction program includes funding for earnings on previously awarded contracts, plus associated Engineering and Design (E&D) and Supervision and Administration (S&A). It also includes work on a variety of projects including: completion of Cedar Hammock, Wares Creek, Florida and West Sacramento, California; as well on continuing significant work on several dam safety project and dam safety studies at the dams that have been identified as high-risk.

The FRM program for operation and maintenance includes critical operation, maintenance and repair work and capability work for the Inspection of Completed Works efforts and work on asset management and risk-base condition indices.

Table 2: FRM Five-Year Base Plan by Account (\$ Millions)

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Investigations	\$37	\$35	\$33	\$31	\$30
Construction	\$919	\$873	\$816	\$775	\$756
Operation and Maintenance (O&M)	\$497	\$472	\$441	\$419	\$409
Mississippi River and Tributaries (MRT)	\$174	\$165	\$154	\$147	\$143
Total	\$1,627	\$1,445	\$1,444	\$1,372	\$1,338
Note: Includes CAP and Remaining Items					

Base Plan Highlights

Base Plan Highlights

- Water Resource Priorities Study (Section 2032 Flood Vulnerability Study): This study is authorized by the Water Resources Development Act of 2007 which calls for a report on the vulnerability of the Nation to damage from flooding. The report is to include an assessment of the extent to which programs in the United States relating to flooding address flood risk priorities, the extent to which such programs may be encouraging development and economic activity in flood-prone areas, and recommendations for improving those programs.

This investigation will include 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 and policies intended to address that risk. The investigation will include a technical element, which will examine the risk of damage from flooding to human life and property, and the comparative risks faced by different regions of the United States. It will provide examples to explain why the risk of flooding is greater in some floodplain and some coastal locations than in others, and why and how the risk is changing over time. The study will also include a public policy element assessing the extent to which existing Federal, state and local programs operate (individually and together) to address flood risk reduction priorities; develop

recommendations for improving the effectiveness, efficiency, and accountability of these programs; and propose a strategy to implement those recommendations. The FY2010 budget contains \$2M for the initiation of this study.

- Wise Use of Floodplains: A study of the “Wise Use of Floodplains” was funded in the 2008 Energy and Water Development and Related Agencies Appropriations Act with a focus on identifying any procedural or legislative changes that may be warranted to allow USACE to be more effective in working with other Federal agencies, states and local governments and stakeholders in the management of flood risk. The study is being conducted for the purpose of better understanding the effects of USACE programs and policies in different policy and watershed contexts on floodplain management choices affecting flood risk, and to describe options for policy, legislative or program reforms. Study activities were conducted throughout FY 2009 and the final study report will be completed in FY 2010.
- Dam Safety Assurance and Seepage Control: USACE is continuing a transition to risk-informed concepts for prioritization and decision making within the dam safety program. This includes program requirements, day-to-day routine activities such as inspections, instrumentation, and interim risk reduction measures. This effort is continuing, comprehensive, and integrated into the larger Civil Works program. One product is the justifications and prioritizations for dam safety actions, remedial structural and non-structural, based on a project’s risks and reliability determination. Projects are grouped into five Dam Safety Action Classifications (DSAC) based on a combination of risk, consequences, and reliability with the bottom two categories having the least risk. The top two classifications are the riskiest, and, to the extent possible, are being fast-tracked through the planning, design, and construction process. They also include substantial interim risk reduction measures such as reservoir restrictions, increased surveillance, and additional public awareness. A program of Periodic Assessments is being developed to start in FY10 to assess each dam on a 10-year cycle. Many dams in preliminary risk screening have been recommended for an additional investigation. This additional investigation analyzes remediation appropriateness. The planning, design, and construction of remedies will continue for at least ten years or until all dams in the top three DSAC categories have been modified.
- Levee Safety Initiatives and Program Development: The National vision for this initiative follows the concept that federal levees should be 1) safe and reliable; 2) managed in a partnership of shared responsibilities, 3) assessed in a comprehensive and continuing program; and 4) effectively communicated to all stakeholders, decision-makers, and communities. Utilizing lessons learned and risk assessment, this program will use best existing resources and maximize its decision making processes. USACE has approximately 2,000 levees in its nationwide portfolio with many caretakers nationwide. USACEs' Levee Safety Program is continuing to research, develop and implement specific tools, policies, and methods which include: a levee screening tool and classification process to assess the entire USACE portfolio on a consistent basis and characterize the results, interim risk reduction methods and concepts until permanent remediation is achievable, methodology testing and finalization of periodic inspection and assessment criteria, a Levee Portfolio Risk Management Process, a comprehensive Engineer Regulation for Levee Risk Management, a levee inventory and inspection process. These various products and evaluation processes will provide a solid

foundation for USACEs' Levee Safety Program and a significant advancement in flood risk management.

Table 3: FRM Five-Year Base Plan Performance

Fiscal Year	2010	2011	2012	2013	2014
Budget (\$ Millions)	\$1,627	\$1,546	\$1,444	\$1,372	\$1,338
Additional People Protected in Flood Plain (000)	2,765	500	384	1,712	2,267
Cumulative People Protected in Flood Plain (000)	2,765	3,265	3,649	5,361	7,628
Annual Benefits Brought On Line (\$ Millions)	\$ 77	\$ 6	\$ 262	\$ 375	\$ 248
Cumulative Annual Benefit Brought On Line (\$ Millions)	\$ 77	\$ 83	\$ 345	\$ 720	\$ 968
Note: Includes CAP and Remaining Items					

Project Spotlight: Duck Creek, Ohio Flood Protection Project

District: Louisville District

Location: Cincinnati, Ohio
(between Interstate 71 and U.S.
Highway 50)

Project: Protecting Eastern
Cincinnati from flash flooding

This project is protecting a highly urbanized area that suffers from flash flooding. The flooding covers low-lying roads causing public safety issues; two drownings occurred since the project authorization in 1996. The flooding causes about \$3.9 million in average annual damages to businesses and homes along Duck Creek.

The project will help protect the public, and protect 35 residential, commercial, and industrial structures to the annual one percent chance of exceedance level (100-year level of protection). Project features include levees, floodwalls, a pump station, a culvert, automated floodgate closure, and an emergency access road. The project also includes replacement of a railroad bridge to provide a wider stream opening, demolition of an abandoned highway bridge, installation of a flood emergency warning system, and environmental mitigation.

Construction was initiated in 1999. The signature project feature is a 1,150-foot long, 14-foot high, and 48-foot wide, reinforced concrete arch culvert that bypasses floodwaters around an oxbow bend. The Louisville District is currently constructing floodwalls and earthen levee along the upstream reach of the creek and anticipates completion of the project in 2011.



Enhanced Funding and Performance

The enhanced plan program contains funding for completion of ongoing construction projects and highest return studies. The enhanced funding would bring some studies and projects to an earlier completion.

**Table 4: FRM Five-Year Enhanced Plan by Account
(\$ Millions)**

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Investigations	\$85	\$87	\$89	\$91	\$86
Construction	\$927	\$949	\$973	\$993	\$942
Operation and Maintenance (O&M)	\$503	\$515	\$527	\$538	\$511
Mississippi River and Tributaries (MRT) Investigations	\$173	\$177	\$181	\$185	\$176
MRT Construction	\$	\$	\$	\$	\$
MRT O&M	\$	\$	\$	\$	\$
MRT Remaining Items	\$	\$	\$	\$	\$
Total	\$1,688	\$1,728	\$1,771	\$1,807	\$1,715
Note: Includes CAP and Remaining Items					

Initiatives for Enhanced Plan

- Accelerate the Levee Safety Program
- Accelerate high-performing projects and thus avoid potential cost increases in the future
- Increase funding to reduce backlog of maintenance needs and increase reliability of existing projects.

Table 5: FRM Five-Year Enhanced Plan Budget and Performance

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Budget (\$ Billions)	\$1,688	\$1,728	\$1,771	\$1,807	\$1,715
Additional People Protected in Flood Plain (000)	2,908	743	647	2,283	7,942
Cumulative People Protected in Flood Plain (000)	2,908	3,651	4,298	6,581	14,523
Annual Benefits Brought On Line (\$ Millions)	\$ 109	\$ 45	\$ 402	\$ 498	\$ 302
Cumulative Annual Benefit Brought On Line (\$ Millions)	\$ 109	\$ 154	\$ 556	\$ 1,045	\$ 1,347

Potential Work with “Wedge Money”

If “wedge” money for new starts was received for this business program, additional projects could be considered. While specific funding decisions would be made at that time, several examples of projects that could be considered are:

- Augusta, Georgia
- Greens Bayou, Houston, Texas
- Clear Creek, Texas

Environment

- **Aquatic Ecosystem Restoration**
- **Environmental Stewardship**
- **Formerly Utilized Sites Remedial Action Program (FUSRAP)**



**Rivers
Lakes
Wetlands
Coasts**



Aquatic Ecosystem Restoration



-Mud Lake Restoration near Dubuque, Iowa

Key Statistics

- ❖ In FY10, this program accounted for approximately 11% of the Civil Works program budget.
- ❖ The \$214 million included for continuing implementation of Everglades Restoration is a fifteen percent increase over the FY 09 and reflects a commitment to implementation of this historic restoration effort.
- ❖ The base program includes \$25 million for the Louisiana Coastal Area project, of which \$5 million will be used to further the Science program which is critical since restoration of complex delta and coastal processes at this scale is unprecedented.

Accomplishments

- After two decades, the ecosystem restoration program, although relatively young, has a history of results across the nation in both large and small projects.
- About 20,200 acres of habitat were restored, created or protected, of which approximately 52% was nationally significant for the period FY06 through FY08;
- An additional estimated 10,200 acres are projected to be completed in FY09, of which almost 17% is nationally significant

Future Challenges

Local desires for Federal assistance and willingness to cost-share individually authorized projects drive this program rather than any national programmatic assessment that identifies the most critical or endangered ecosystems. Nevertheless, the demand for funding aquatic ecosystem restoration projects surpasses the resources available to respond. In the absence of a standard performance measure to be used across all agencies, USACE has been working to develop significance criteria to assist in evaluating and prioritizing projects. This would eventually allow objective comparison of disparate ecosystem restoration projects that occur in varied geographic regions across the country.

Program History and Performance

This subprogram is an integral part of Integrated Water Resources Management and supports the Civil Works Strategic Goal 2 and objectives as described below:

Strategic Objective 2.1: Invest in economically and environmentally justified and socially acceptable water resources solutions.

Sub Objective is 2.1.12: Implement integrated and collaborative approaches to effectively solve water resource problems.

Table 1: Aquatic Ecosystem Restoration Historical Funding and Performance

<i>Fiscal Year</i>	2005	2006	2007	2008	2009
Appropriation (\$ Millions)	\$480	\$516	578 ²	\$515	532
Acres of habitat restored, created, improved, or protected	32,573	13,000	4,800	2,445	10,200
Nationally significant acres of habitat restored, created, improved, or protected		5,500	3,000	1,986	1,700
Cost per acre to restore, create, improve, or protect nationally significant habitat		\$9,800	\$6,770	\$6,700	\$18,000
Percent of all restored, created, improved, or protected acres of habitat that is nationally significant	Note 1	42%	62%	69%	17%
Note 1: Performance measures were developed in FY 06, and it is the first year of reporting					
Note 2: After 2006 all appropriations include all remaining items assigned to AER					
Note 3: Results are estimates					

Spring Lake Islands and Peninsula, Pool 5 Upper Mississippi River Environmental Management Program Habitat Rehabilitation and Enhancement Projects

Peninsula portion of the project completed in 1995.

Island stabilization, island /mudflat restoration and backwater dredging started in 2004 and completed in 2006.

1930

1951

1991

2007



-Jeff Janvrine, Wisconsin DNR

Figure 1: Spring Lake Islands, Buffalo City, Wisconsin

Spring Lake is a 300-acre backwater lake located on the Wisconsin side of the Mississippi River within the Upper Mississippi River National Wildlife and Fish Refuge. Natural islands along the west side of Spring Lake had eroded and many had disappeared since the creation of Pool 5 (a river segment created by a dam). Previously, these islands protected the lake from the effects of the main river channel and reduced wind fetch and associated wave action. Island loss was degrading the fish and wildlife habitat in the lake because of higher turbidity levels and undesirable aquatic plant bed conditions. The project consisted of building islands along the west side of the lake and within the lake to restore habitat and diversity. Material was dredged from Spring Lake for island fill and topsoil, creating additional deeper areas for fish habitat. The project will slow the degradation of about 200 acres of valuable backwater fish and wildlife habitat, directly affecting two-thirds of the lake. Project construction began in September 2004 and was completed in June 2006. Planting of trees on the islands will finish the project in 2008. Total cost of the project is about \$4,395,000. This example is typical of the program's work.

Performance Measures

Below are the applicable performance measures for Aquatic Ecosystem Restoration:

- ❖ Acres of habitat restored, created, improved, or protected. This is an annual output measure and the baseline is FY05.
- ❖ Nationally significant acres of habitat restored, created, improved, or protected. This measures the subset of acres of habitat restored each year that have high quality outputs as compared to national needs. This is an annual output measure.
- ❖ Percentage of all acres of habitat restored, created, improved or protected in a four-year period that are nationally significant. The long-term goal is for 75 percent of the total acres restored, created, improved, or protected. This is an annual measure.
- ❖ Dollars per acre to restore, create, improve or protect nationally significant habitat. The cost of the projects that produce nationally significant acres in any given year will be used to calculate this figure. The goal would be to restore more acres per dollar expended in the long run through efficiencies in project execution or other considerations.

Starting with 2008 this business program is crediting acres in a given year when physical construction is complete, instead of the last year that the project is budgeted in the construction account. This is due to the increased use of fully-funded contracts and the out-year monitoring requirements for many projects.

The Aquatic Ecosystem Restoration business program developed a set of seven criteria that together provide a basis for evaluating project significance and aid in setting FY 2010 funding priorities. The seven criteria are weighted and criteria definitions have been established to determine the extent to which a project contributes to the measure details of these performance measures are not included in this report).

The criteria are:

- 1) **Habitat scarcity and status:** The goal is to promote the restoration of scarce habitat with an emphasis on nationally scarce habitat that continues to become scarcer.
- 2) **Connectivity:** Criterion addresses the extent to which a project facilitates the movement of native species by contributing to the connection of other important habitat pockets within the ecosystem, region, watershed, or migration corridor, or adds a critical component to an ecosystem or increases biodiversity.
- 3) **Special Status Species:** Acknowledges projects that provide a significant contribution to some key life requisite of a special status species.
- 4) **Hydrologic Character:** This criterion recognizes the importance of appropriate hydrology in maintaining the ecological functions of aquatic, wetland, and riparian systems.
- 5) **Geomorphic Condition:** This criterion relates to the establishment of suitable structure and physical processes for successful restoration.

- 6) **Plan Recognition:** Documents the extent to which a project contributes to watershed or basin plans as emphasized in the Civil Works Strategic Plan.
- 7) **Self Sustaining:** Ecosystem sustainability is the ultimate goal of restoration efforts but is difficult to measure. As a proxy, the cost of the project's average annual Operation and Maintenance cost is used to measure the degree of project sustainability.

The first three measures along with Plan Recognition are used to determine national and regional significance. These criteria are reviewed and revised annually.

Project Spotlight: Everglades

District: Jacksonville District

Location: South Florida

Link: www.evergladesplan.org

The objective of the South Florida Everglades Ecosystem Restoration Program is to restore, protect and preserve the south Florida ecosystem, while providing for other water-related needs of the regions. The South Florida Greater Everglades ecosystem includes a diverse mosaic of upland,

marsh, freshwater, estuarine, and saltwater habitats in a watershed encompassing approximately 16,000 square miles.



The South Florida Everglades Ecosystem Restoration Program includes the Central and Southern Florida Project (C&SF), the Kissimmee River Restoration Project, and the Everglades and South Florida Restoration Project, Modified Water Deliveries Project, and the Comprehensive Everglades Restoration Plan (CERP). In FY09, the program is funded at \$185 million.

Under C&SF a systems approach is used in the implementation of CERP. Individual CERP projects are selected based on the principal of "system formulation". Individual projects are justified and evaluated based on their contribution to overall hydrologic connectivity and synergistic impact in the immediate and larger watershed context. The project's separable elements must be consistent with the Governor's Commission's Conceptual Plan and produce independent, immediate, and substantial restoration, preservation and protection benefits. Four projects have been completed under this authority; a fifth is nearly complete; and a sixth is expected in coming few years. In this discussion we highlight two components: Kissimmee River Basin and Modified Water Deliveries.

The Kissimmee River Basin (pictured) is approximately 3,000 square miles located between Orlando and Lake Okeechobee. Work is being completed to restore and re-establish similar historic wetland conditions for more than 40 square-miles of river-floodplain ecosystem including almost 27,000 acres of wetlands and 52 miles of historic river channel. To date, 10 miles of the 22 miles of the C-38 canal have been backfilled, restoring hydrologic conditions. Native flora and fauna have responded with dramatic improvements. Continuing construction in the next few years is expected to include backfill work on the remaining canal reaches and will restore significant segments of the original river system.



Native flora and fauna have responded with dramatic improvements. Continuing construction in the next few years is expected to include backfill work on the remaining canal reaches and will restore significant segments of the original river system.

The Modified Water Deliveries to Everglades National Park (MWD) involves construction of modifications to the C&SF Project and related operational changes to provide improved water deliveries to Everglades National Park. These modifications will improve hydrologic connectivity between the Water Conservation Areas north of the Park and across the Tamiami Trail (Highway 41) to the headwaters of Shark River Slough within the Park, while providing flood mitigation to the 8.5 Square Mile Area (SMA- a residential area adjacent to the Park). Wetland habitat in the Park should improve through deep sloughs and sheetflow restoration in the Northeast Shark River Slough, and promoting a more natural hydroperiod while reducing the biological affects that the C&SF Project has had on the Park.

Base Funding

The total FY10 budget request for the program is \$547 million. The base program for studies and design includes continuing requirements not to exceed FY09 amounts, plus additional work on the highest performing studies and design efforts with preference given to high performing studies in the last year of a phase.

There is continuing need to refine the methods used for identifying restoration priorities, planning, and implementation. The FY10 program continues to emphasize research on Environmental Benefits Assessment that will contribute to increased program consistency, enhanced reliability of benefit estimates, and scientifically supported project justifications. This will eventually result in improved performance measures and assessment, as well as improvements in priority setting, evaluation and accountability.

Budget priority is placed on studies or projects that contribute to the cost-effective restoration of regionally or nationally significant ecosystems where USACE is uniquely well suited due to the requirement for hydrologic and geomorphic alterations or where a USACE project has contributed to the degradation of the area to be restored. The objectives of the business program, with regard to budgeting high-performing projects, are to implement projects that provide high value, cost-effective outputs. Value is determined by assessing the project in terms of its impact on scarcity, connectivity, special status species, hydrologic and geomorphic character, plan recognition and sustainability.

**Table 2: Aquatic Ecosystem Restoration Base Funding
(In Millions)**

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Investigations	\$ 44	\$ 42	\$ 39	\$ 36	\$ 32
Construction	\$ 481	\$ 454	\$ 427	\$ 390	\$ 352
Operation and Maintenance (O&M) Estimate	\$ 17	\$ 16	\$ 15	\$ 14	\$ 12
Mississippi River and Tributaries (MRT)	\$ 5	\$ 5	\$ 4	\$ 4	\$ 4
Total	\$ 547	\$ 516	\$ 486	\$ 443	\$ 400
Note: Includes Continuing Authorities Program (CAP) and Remaining Items					

Base Plan Highlights

- The FY10 proposed program would restore approximately 7,100 acres, of which most would be considered nationally significant and the remaining are considered important by sponsors for overall ecosystem health.
- Optimal funding of \$25 million for the Louisiana Coastal Area study, including \$20 million for the study and \$5 million for the Science program.
- A new study start to look at the issue of transfer of aquatic nuisance species between the Great Lakes and Mississippi River Basin.
- Everglades work is funded at \$214 million
- Upper Mississippi River Restoration is funded at \$20 million.
- \$5 million for continuing work on the Chicago Sanitary and Ship Canal Dispersal Barriers I and II.
- Additionally, in 2010, Davis Pond, LA will complete allowing diversion of fresh water from the Mississippi River to Barataria Bay.

The following table displays outputs that would be produced in the base plan program FY10 thru FY14, based on completion of construction of additional projects.

Table 3: Aquatic Ecosystem Restoration Base Funding and Performance

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Appropriation (\$ Millions)	\$547	\$516	\$486	\$443	\$400
Acres of habitat restored, created, improved, or protected	7,100	9,000	210,000	2,033	936,000
Nationally significant acres of habitat restored, created, improved, or protected	7100	9,000	210,000	2,033	744,000
Percent of all restored, created, improved, or protected acres of habitat that is nationally significant	100%	100%	100%	100%	80%
Cost per acre to restore, create, improve, or protect nationally significant habitat	\$2,500	\$2,600	\$700	\$2,300	\$650

Note: Cost per acre is based only on nationally significant projects completing in the specified year. It is strongly influenced by individual projects of very high acreage and low cost. 2009 figures are estimates.

Enhanced Funding and Performance

The enhanced plan will improve program performance beyond the base plan. More acres will be restored, created or improved throughout FY10 to FY14. More acres can be restored over the base plan by FY13. Some projects planned in the base can be advanced more quickly with additional funds. Completing projects more quickly can lead to even higher project outputs in future years since restoration projects start flourishing once complete.

**Table 4: Aquatic Ecosystem Restoration Enhanced Funding
(In Millions)**

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Investigations	\$ 60	\$ 61	\$ 62	\$ 62	\$ 61
Construction	\$ 465	\$ 473	\$ 480	\$ 481	\$ 476
Operation and Maintenance (O&M)	\$ 12	\$ 12	\$ 13	\$ 13	\$ 12
Mississippi River and Tributaries (MRT) Project	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
Total	\$ 542	\$ 551	\$ 559	\$ 561	\$ 555
Note: Includes CAP and Remaining Items					

Enhanced Plan Initiatives

- Advance South Florida Everglades project
- Advance Louisiana Coastal Area Restoration
- Advance Lower Columbia Restoration
- Advance watershed studies

The following table displays outputs produced in the enhanced plan program FY10 thru FY14, based on completion of construction of additional projects.

Table 5: Aquatic Ecosystem Restoration Enhanced Funding and Performance

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Appropriation (\$ Millions)	\$542	\$551	\$559	\$561	\$555
Acres of habitat restored, created, improved, or protected	7,100	9,000	210,000	2,033	936,000
Nationally significant acres of habitat restored, created, improved, or protected	7,100	9,000	210,000	2,033	744,000
Percent of all restored, created, improved, or protected acres of habitat that is nationally significant	100%	100%	100%	100%	80%
Cost per acre to restore, create, improve, or protect nationally significant habitat	\$2,500	\$2,600	\$700	\$2,300	\$650

Note: Cost per acre is based only on nationally significant projects completing in the specified year. It is strongly influenced by individual projects of very high acreage and low cost. 2009 figures are estimates.

Potential Work with “Wedge Money”

If “wedge” money for new construction starts was received for this business program, additional projects could be considered. While specific funding decisions would be made at that time, several examples of projects that could be considered are:

Some examples are:

- Hamilton City, California
- Louisiana Coastal Area Construction Starts
- Smith Island, Maryland

Environmental Stewardship



Key Statistics

- ❖ Stewardship provided on about 11.5 million acres comprising about 8% of Federal acreage east of the Rockies
- ❖ About 4.3 million USACE acres have significant waterfowl use or improvement potential
- ❖ Help conserve 232 federally listed threatened or endangered species
- ❖ Nearly 47,000 known cultural resources sites exist on USACE property; 846 listed on the National Register of History Places and 7,500 eligible for listing

Accomplishments

- Participating in recovery of 58 federally listed threatened or endangered species on 139 USACE operating projects. These efforts contributed to the delisting of the bald eagle.
- Stewardship on USACE lands and waters provides the basis for quality outdoor recreational opportunities, and annually supports 100 million fishing visits, 9 million hunting visits, and 63 million wildlife watching visits
- The Audubon Society and the American Bird Conservancy designated 23 Important Bird Areas on USACE properties.
- Program manages diverse resources to promote sustainability, e.g. fish, wildlife, water, woodland, wetland, and cultural. These administered acres provide key habitats: water, edge, forage, cover, and critical green space for human populations.

Future Challenges

- Completing basic inventories of existing natural resources and their conditions to improve management effectiveness and efficiency
- Improving the condition of USACE lands and waters such that they are sustainable and available for future generations while balancing increasing and conflicting demands for the use and development of project lands and water
- Meeting the minimum requirements of environmental mandates for resource protection, health and safety
- Prioritizing use of constrained fiscal resources.

Program History and Performance

The Stewardship program supports Civil Works Strategic Goal 3 and five of its objectives. Seven performance measures assess progress toward meeting the identified goal and objectives.

Strategic Objective 3.1: Improve the efficiency and effectiveness of existing USACE water resources projects.

- ❖ **Performance Outcome 1:** Program efficiency is achieved. A percentage of program expenditures are recovered or leveraged through prudent natural resources use in accordance with the program mission.
 - **Efficiency Performance Measure:** *Cents per dollar of agency operation and maintenance spending that the program lessees or licensees pay for.* This assesses Federal costs avoided in relation to the program's cost, as an indicator of program efficiency. Annual revenue is from timber sales revenue, agricultural leases, and related contributions consistent with the resource protection and conservation program missions. For example, timber harvests are sometimes necessary to support healthy forested lands, and to prevent disease or wildfire. The timber must be disposed at Federal cost, or sold when possible to minimize disposal cost. Revenue is recovered by the project of origin. In many cases, revenues are used to replant, reseed and/or otherwise reclaim the site and results in no net revenue gain. Revenue recovered is equivalent to the federal costs avoided and will vary each year due to the nature and extent of the sustainability practices implemented. However, since the revenue generating sources cannot be predicted, this is not a driver for budget development.

Strategic Objective 3.1.3: Ensure healthy and sustainable lands and waters and associated natural resources on USACE lands in public trust to support multiple purposes.

- ❖ **Performance Outcome 2:** USACE lands and waters are maintained in, or managed toward, a healthy and sustainable condition. Intensive management needs and costs are reduced as lands move to a healthy, sustainable state.
 - **Healthy and Sustainable Lands and Waters Performance Measure:** *Percent of healthy and sustainable acres on USACE fee-owned property.* This is defined as the number of USACE fee-owned acres classified as in a sustainable condition divided by the total number of USACE fee-owned acres. The result provides an indicator of the condition status of all USACE fee-owned acres. Sustainable is defined as meeting the desired state. The acreage is not significantly impacted by any factors that can be managed and does not require intensive management to maintain the health. The acreage also meets operational goals and objectives set forth in applicable management documents.

Strategic Objective 3.1.3.1: Protect, preserve and restore significant ecological resources in accordance with master plans.

❖ **Performance Outcome 3:** Endangered and threatened species are protected on USACE property.

- **Endangered Species Protection Performance Measure:** *This measure is a percent defined as the total number of projects that are meeting Endangered Species Act (ESA) responsibilities of the year divided by the total number of USACE projects that have ESA compliance responsibilities in the year.*

❖ **Performance Outcome 4:** The identification and assessment of quality and quantity of ecological resources on USACE property is achieved.

- **Level One Natural Resources Inventory Completion Performance Measure:** *Percent of minimum Level One Natural Resources Inventory completed on USACE property. This demonstrates the status of USACE efforts in completing basic, Level One Natural Resources Inventories required by Engineer Regulation 1130-2-540. Such inventories are necessary for sound resource management decisions and strategies development. The minimum inventory includes four standard components on each project: 1) classification and 2) quantification of vegetation, wetland, and land (soils) capability acreage, and 3) identification and 4) assessment of special status species for potential existence on USACE acreage. This is defined as the sum total acres of completed inventory for each of the four components divided by four times the total number of USACE fee-owned acres. The proportion (%) yielded is used to evaluate the relative completeness of the Inventory.*

❖ **Performance Outcome 5:** Balanced public use and access to USACE project natural resources is achieved, while accomplishing USACE project missions.

- **Master Plan Completion Performance Measure:** *Percent of USACE-operated water resource projects with completed Master Plans in compliance with Engineer Regulation 1130-2-550 of the total number of required Master Plans. A Master Plan is completed, per regulation, to foster an efficient and cost-effective project for natural resources, cultural resources, and recreational management programs. It provides direction for project development and use, and promotes the protection, conservation, and enhancement of natural, cultural and man-made resources. The Master Plan is a vital tool for responsible stewardship and demonstrates USACE commitment to fully integrate environmental stewardship.*

Strategic Objective 3.1.3.2: Ensure that the operation of all Civil Works facilities and management of associated lands, including out-granted lands (lands leased or licensed to others for various purposes), complies with the environmental requirements of relevant Federal, state, and local laws and regulations.

❖ **Performance Outcome 6:** Cultural resources on USACE property are managed in accord with cultural resources management mandates.

- **Cultural Resources Management Performance Measure:** *Percent of projects meeting federally mandated cultural resources management responsibilities. This demonstrates the status of efforts to protect and preserve cultural resources on USACE administered lands*

and waters. It is defined as the total number of USACE projects meeting federally mandated cultural resources management responsibilities divided by the total number of USACE projects with federally mandated cultural resources management responsibilities.

Strategic Objective 3.1.3.3: Meet the mitigation requirements of authorizing legislation or applicable USACE authorization decision document.

- ❖ **Performance Outcome 7:** USACE requirements are met for the mitigation of impacts to ecological resources, as specified in project authorizing legislation.
 - **Mitigation Compliance Performance Measure:** *Percent of USACE administered mitigation lands (acres), or the percent of pounds or numbers of mitigation fish produced at mitigation hatcheries, meeting the requirements in the authorizing legislation or relevant USACE authorization decision document.* This measure demonstrates USACE status in meeting mitigation requirements that are specified in project authorizations. Achievement of mitigation contributes to restoring lands and other resources to a healthy and sustainable condition. The measure is defined as either the mitigation acres meeting mitigation requirements divided by the total designated mitigation acres, or the total mitigation fish produced divided by the total mitigation fish needed to meet requirements.

History

Funding and performance history for the Environmental Stewardship business program as a distinct entity did not exist prior to FY05, when budgeting by business program was first implemented. Performance results data are presented in Table 1 for all measures applicable in a given year. Some historic data was incomplete and therefore inaccurate due to inconsistent implementation of a new data collection system deployed in late FY05. However, the actual results for each measure are displayed in the table as they were recorded each year. Results are directly related to, and derived from, the funding provided.

Table 1: Environmental Stewardship Historical Funding and Performance

<i>Fiscal Year</i>	2005	2006	2007	2008	2009
Operation and Maintenance (O&M)	\$91	\$85	\$93	\$106	\$90
Mississippi River and Tributaries (MR&T O&M)	\$9	\$9	\$2	\$4	4
Appropriation (\$ Millions)	\$100	\$94	\$95	\$110	
Mitigation Compliance	76%	61%	77%	100%	100%
# Acres meeting mitigation requirement (in millions)	0.61	0.27	0.50	0.65	0.65
# Acres authorized for mitigation (in millions)		0.45	0.65	0.65	0.65
# lbs of mitigation fish produced (millions)	--	--	--	1.10	1.10
# lbs of mitigation fish required (millions)	--	--	--	1.10	1.10
# of mitigation fish produced (millions)	--	--	--	19.8	19.8
# of mitigation fish required (millions)	--	--	--	19.8	19.8
Endangered Species (ES) Protection	NA	NA	NA	100%	100%
# Projects meeting ES Act requirements	--	--	--	237	164
# Projects with ES Act requirements	--	--	--	237	164
Cultural Resources Management	NA	NA	63%	72%	67%
# Projects meeting cultural resources requirements	--	--	153	141	141
# Projects with cultural resources requirements	--	--	244	197	212
Healthy and Sustainable Lands and Waters	37%	21%	18%	25%	38%
# Fee acres classified as in sustainable condition (millions)	1.06	1.41	1.45	2.00	3.00
# Fee acres (millions)	2.8	6.73	7.94	7.94	7.97
Level One Natural Resources Inventory Completion Index	33%	38%	40%	41%	50%
Average # acres with completed inventory (millions)	2.33	2.54	3.24	3.3	3.50
Average # acres requiring inventory (millions)	7.17	6.99	7.94	7.94	6.99
Master Plan Completion	32%	27%	27%	27%	27%
# Up-to-date master plans	101	104	101	101	104
# Master plans required	306	380	379	379	380
Efficiency (cents per dollar)	\$0.09	\$0.10	\$0.12	\$0.11	0.11
\$ Revenue (millions)	\$9.23	\$9.87	\$11.38	\$12.10	10.00
\$ Appropriation (millions)	\$100	\$94	\$95	\$110	95
Note: 2008 values are estimated					

Improved annual performance is noted in Mitigation Compliance and Endangered Species Protection Performance Measures. The annual minimal requirements of environmental and legal mandates are projected to be met in FY08. However, past constrained budgets have allowed meeting only the highest priorities: the minimal requirements of Cultural Resources Management, and Healthy and Sustainable Lands and Waters outputs. For Cultural Resources Management, the

number of projects with an annual compliance requirement decreased from FY07 to FY08. However, the number of projects that satisfy the annual requirements remained fairly constant, causing the estimated performance output percentages to increase. For Healthy and Sustainable Lands and Waters Performance Measure acreage, performance was projected based on work and output descriptions, prior year results, and the similar budget amounts for these activities, from FY07 to FY08. It is noted more than half of the FY08 Stewardship program budget was intended to accomplish the critical annual requirements of endangered species, mitigation, and cultural resources. These requirements do not exist on every USACE project. Approximately \$4 per acre was available to support most stewardship responsibilities: those remaining mandated or essential, day-to-day requirements necessary at each project to meet project purposes; prevent resources degradation or loss; and achieve healthy and sustainable lands.

Results in Level One Natural Resources Inventory and Master Plan Completions have remained fairly constant. Constrained past budgets have limited progress and additional output is budget dependent in these areas. The Efficiency results have averaged at \$0.10 recovered on each dollar of program funding, exceeding the annual target. Since the efficiency result is not directly related to the budget and revenue recovery may not be predicted, the target was set at \$0.01 each year to avoid promoting revenue recovery at the expense of resource sustainability.

Project Spotlight: Fern Ridge

District: Portland District

Location: Southern Willamette River Valley in Oregon

Project: Healthy and Sustainable Lands and Endangered Species



The Fern Ridge Dam provides for flood damage reduction, fish and wildlife, irrigation, recreation, navigation, and improved water quality. Fern Ridge has over 12,000 acres of land and reservoir, of which hundreds of acres are prairie habitat that is home to endangered plants and butterflies (Fender's Blue), as well as numerous special status species. Level 1 Inventories ascertained that endangered species existed here. The Master Plan developed and outlined management activities to ensure the Endangered Species will persist on project lands and federal lands and waters are kept in a healthy and sustainable condition (Compliance with NEPA Section 101).

Land management activities included prescribed burns, removal of non-native vegetation, enhancing native vegetation through seed collection and plantings, and creating habitat diversity. These land management functions are done in partnership with multiple agencies and also serve to benefit recreation opportunities at the lake by providing pristine natural areas for hiking, bird



watching, and hunting. In addition, management and habitat development for the Fender's Blue Butterfly is improving its viability at and near Fern Ridge in several ways. Habitat development provides sufficient food resources for the species and allows populations to expand to habitats both on and off USACE lands. This all helps protect the species from extinction and potentially lead toward recovery.

Base Funding and Performance

Under the Base Plan Scenario in Table 2, the funding for Stewardship decreases. This plan projects output reductions, or no output gains for measures, because work may be delayed, conditions deteriorate, and costs increase. Continued flat or declining funds impact the ability to maintain healthy resources conditions. Timely and effective management actions that help prevent resource degradation and that promote sustainability are essential to meet USACE environmental trustee responsibilities. Some of these actions would likely be delayed as funding to support these efforts decreases. Management needs grow quickly in scope and often become more expensive when important management efforts are forgone, such as the control of invasive species, and threaten the continued viability of native ecological resources.

A strong emphasis in meeting specific environmental mandates and requirements continues in this scenario. In any given year, there may be several minimum output requirements for certain projects. Most of these minimum output requirements are met successfully, however, the success of meeting requirements is contingent on funding levels during the given year. Cultural Resources Management responsibilities will not be fully met in this funding scenario. Risk to cultural resources will likely be higher, since the minimum required management activities go unfunded.

A related decrease in anticipated performance output will manifest over the period. Over the five-year period, vital stewardship requirements (such as trespass and encroachment prevention; erosion, fire, pest, and invasive species control and prevention, boundary surveillance and monitoring, and shoreline use evaluation), and staffing levels necessary to achieve Healthy and Sustainable Lands and Waters outputs could remain unfunded. Similarly, the cost for those efforts could increase, forcing the annual targets to trend downward. Outputs for Healthy and Sustainable Lands and Waters could shift to avoid a compromise of minimum safe project operating conditions.

The Level One Natural Resources Inventory Completion and Master Plan Completion performance targets will not change over the five-year period, due to targeting resources at other priority activities. Lack of progress compromises the ability to develop and implement best

resource management strategies and decisions. This is due to the lack of standard up-to-date resource quality and quantity data, and up-to-date project resources management guides.

Efficiency targets are held at \$0.01 recovered per program dollar over the five-year term, to maintain consideration of the program goal, but to avoid promoting revenue recovery at the expense of resources sustainability.

Table 2: Environmental Stewardship Base Funding

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Investigations	-	-	-	-	-
Construction	-	-	-	-	-
Operation and Maintenance (O&M)	\$ 94	\$ 95	\$ 95	\$ 97	\$101
Mississippi River and Tributaries (MRT) Project	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5
Total	\$ 99	\$100	\$100	\$102	\$106
Note: Includes Remaining Items					

Initiatives for Base Plan

The program priorities are aligned with goals and objectives of the Civil Works Strategic Plan. Initiatives in the Base Plan scenario include meeting the minimum critical requirements of environmental and legal mandates to assure project compliance, assuring safe project operation, and preventing loss or degradation of resources. To the extent practicable, the Base Plan will seek to maintain performance output levels close to those achieved in FY08, and to minimize impacts to the program outcome of Healthy and Sustainable Lands and Waters.

Table 3: Environmental Stewardship Base Funding and Performance

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Operation and Maintenance (O&M)	\$99	\$100	\$100	\$102	\$106
Appropriation (\$ Millions)	\$99	\$100	\$100	\$102	\$106
Mitigation Compliance	76%	98%	98%	98%	98%
# Acres meeting mitigation requirement (in thousands)	0.49	0.566	0.566	0.566	0.566
# Acres authorized for mitigation (in thousands)	0.65	0.578	0.578	0.578	0.578
# lbs of mitigation fish produced (millions)	1.1	1.16	1.16	1.16	1.16
# lbs of mitigation fish required (millions)	1.1	1.16	1.16	1.16	1.16
# of mitigation fish produced (millions)	19.8	19.62	19.62	19.62	19.62
# of mitigation fish required (millions)	19.8	19.62	19.62	19.62	19.62
Endangered Species (ES) Protection	61%	99%	99%	99%	98%
# Projects meeting ES Act requirements	112	162	162	160	160
# Projects with ES Act requirements	185	164	164	164	164
Cultural Resources Management	53%	57%	57%	57%	57%
# Projects meeting cultural resources requirements	123	120	120	120	143
# Projects with cultural resources requirements	233	212	212	212	212
Healthy and Sustainable Lands and Waters	45%	26%	25%	24%	23%
# Fee acres classified as in sustainable condition (millions)	3.61	2.06	1.98	1.9	1.82
# Fee acres (millions)	7.97	7.94	7.94	7.94	7.94
Level One Natural Resources Inventory Completion Index	54%	46%	46%	46%	46%
Average # acres with completed inventory (millions)	3.82	3.65	3.65	3.65	3.65
Average # acres requiring inventory (millions)	7.1	7.94	7.94	7.94	7.94
Master Plan Completion	32%	27%	27%	27%	27%
# Up-to-date master plans	121	106	106	106	106
# Master plans required	380	380	380	380	380
Efficiency (cents per dollar)	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
\$ Revenue (millions)	\$0.95	\$0.89	\$0.89	\$0.89	\$0.88
\$ Appropriation (millions)	\$95	\$89	\$89	\$89	\$88

Enhanced Funding and Performance

The Enhanced Plan Scenario in Table 4 provides increased annual funding over the five-year period; however, the effective value of each increase is diminished due to inflation. The projected

performance measures of the enhanced plan are based on historic performance results and funding. In general, minor incremental increases in performance output may be realized over the five-year period as most program outputs are budget dependent. This scenario seeks to maintain or improve performance outputs and to accomplish the overall program outcome of Healthy and Sustainable Lands and Waters.

High targets for outputs of Mitigation Compliance and Endangered Species Protection continue to meet specific critical requirements of environmental mandates. Minor increases in Cultural Resources Management outputs are also anticipated in each year. Resource losses are prevented, but completely meeting annual requirements is not anticipated in any year of this scenario. Together, maintenance, or minor improvements continue to positively support the objectives to manage USACE lands and resources to comply with environmental requirements of relevant Federal laws and regulations, and to protect or conserve significant ecological resources.

Acreage targets, classified in a sustainable condition, are also increased to advance the program’s overall outcome. Nearly one third of USACE fee-owned acreage is projected to be classified in this condition by FY13. Target increases for Level One Natural Resources Inventories are raised slightly to promote completion of high priority inventories over the period. However, only a small number of additional Master Plan completions will be afforded over the period due to constrained funds. As explained previously, the Efficiency measure targets hold constant at \$0.01 recovered per dollar of program funding over the term.

Table 4: Enhanced Five-Year Budget

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Investigations	-	-	-	-	-
Construction	-	-	-	-	-
Operation and Maintenance (O&M)	\$ 93	\$ 96	\$ 99	\$ 102	\$ 105
Mississippi River and Tributaries (MRT) Project	5	5	5	5	6
Total	\$ 98	\$101	\$104	\$107	\$111
Note: Includes Remaining Items					

Initiatives for Enhanced Plan

- Meet minimum requirements of environmental and legal mandates to assure project compliance and safe operation
- Prevent loss or degradation of resources and promote the sustainability of resources
- Advance the completion of high priority project natural resource inventories and master plans, which guide the effective and efficient management of existing project natural and cultural resources.

Table 5: Environmental Stewardship Enhanced Budget and Performance

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Operation and Maintenance (O&M)	\$ 98	\$ 101	\$ 104	\$ 107	\$ 111
Appropriation (\$ Millions)	\$ 98	\$ 101	\$ 104	\$ 107	\$ 111
Mitigation Compliance	100%	100%	100%	100%	100%
# Acres meeting mitigation requirement (in thousands)	0.65	0.65	0.65	0.65	0.65
# Acres authorized for mitigation (in thousands)	0.65	0.65	0.65	0.65	0.65
# lbs of mitigation fish produced (millions)	1.10	1.10	1.10	1.10	1.10
# lbs of mitigation fish required (millions)	1.10	1.10	1.10	1.10	1.10
# of mitigation fish produced (millions)	19.80	19.80	19.80	19.80	19.80
# of mitigation fish required (millions)	19.80	19.80	19.80	19.80	19.80
Endangered Species (ES) Protection	100%	100%	100%	100%	100%
# Projects meeting ES Act requirements	185	185	185	185	185
# Projects with ES Act requirements	185	185	185	185	185
Cultural Resources Management	100%	100%	100%	100%	99%
# Projects meeting cultural resources requirements	233	233	233	233	230
# Projects with cultural resources requirements	233	233	233	233	233
Healthy and Sustainable Lands and Waters	27%	29%	31%	34%	36%
# Fee acres classified as in sustainable condition (in millions)	2.14	2.31	2.48	2.73	2.90
# Fee acres (in millions)	7.97	7.97	7.97	7.97	7.97
Level One Natural Resources Inventory Completion Index	51%	53%	58%	58%	60%
Average # acres with completed inventory (millions)	3.65	3.76	4.12	4.15	4.28
Average # acres requiring inventory (millions)	7.1	7.1	7.1	7.1	7.1
Master Plan Completion	27%	28%	30%	31%	31%
# Up-to-date master plans	106	115	121	121	114
# Master plans required	380	380	380	380	380
Efficiency (cents per dollar)	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01
\$ Revenue (millions)	\$ 0.95	1.01	1.04	1.08	1.10
\$ Appropriation (millions)	\$ 95	\$ 101	\$ 104	\$ 108	\$ 110

Potential Work with “Wedge Money”

This program is not included in the assumptions for potential wedge funding in this Five Year Development Plan.

FUSRAP

Formerly Utilized Sites Remedial Action Program



Radiological Scanning of Soil Core Key Statistics

- ❖ There are currently 24 active sites located in 10 states.
- ❖ The program remediates more than 125,000 cubic yards (on average) of contaminated material per year.
- ❖ Currently more than \$1.5 billion additional dollars needed to complete work on active sites.

Accomplishments

- Remedial activities completed on schedule at the Middlesex Sampling Plant soils operable unit in New Jersey and the Tonawanda Mudflats (vicinity property of the Linde site).
- Completed remedial investigations at the Niagara Falls Storage and the Iowa Army Ammunition sites. USACE accelerated remedial action at one operable unit at the Iowa Army Ammunition site to take advantage of appropriate on-site disposal facilities thereby reducing transportation/disposal costs.
- The program excavated 153,782 cubic yards of contaminated material in FY08.

Future Challenges

- . Improving cost and scheduling risk analysis to better anticipate increases in soil volumes affecting schedule and associated project growth costs.
- Additional eligible, “potential” sites are currently being evaluated:
 - Middlesex Municipal Landfill site in Middlesex, New Jersey
 - DOE considering Staten Island Warehouse site referral as eligible for potential inclusion to the program
- Progress for this program is commensurate with funding.

Program History and Performance

Strategic Goal 2 and Strategic Objective 2.3 directly relate to FUSRAP and influenced its specific objective. The FUSRAP Strategic Objective has correlating outcomes and those outcomes have various performance measures.

FUSRAP Strategic Objectives 2.3.1: Achieve the clean-up objectives of the Formerly Utilized Sites Remedial Action Program.

❖ **Performance Outcome:** To minimize risk to human health and the environment.

Performance Measures:

- Number of Records of Decision (RODs) signed. The number of RODs will increase as studies are completed and best alternatives for cleanup activities are decided. A ROD establishes the final cleanup standard, which controls the actual estimate of the remaining environmental liability for each site.
- Number of Remedial Investigations (RI) completed. The RI establishes the baseline risk assessment whereby the level of risk to human health and the environment is identified.
- Number of action memorandums signed. Where warranted by risk or other limited factors, action memorandums allow the USACE to move toward reducing risk more rapidly than through production of a ROD. No action memorandums are presently identified.

❖ **Performance Outcome:** To maximize the cubic yardage of contaminated material disposed in a safe and legal disposal facility.

Performance Measures:

- Cubic yardage of contaminated material disposed. Target soil amounts after FY09 are dependent on previous year funding and scheduled activities. Therefore, at this time it is not possible to predict target soil amounts for out-years.
- Total cost of disposal of contaminated material as measured in cubic yards. Currently this measure is scheduled to be evaluated at the end of FY09.

❖ **Performance Outcome:** To return the maximum number of affected individual properties to beneficial use.

Performance Measures:

- Number of individual properties returned to beneficial use.

❖ **Performance Outcome:** To have all remedies in place as quickly as possible within available funding limits

Performance Measures:

- Cumulative percentage of FUSRAP funding that is expended on cleanup activities rather than studies.
- As the program matures, the percentage of funding expended on cleanup activities will be greater than funding spent on conducting studies.

- This measure was evaluated in FY08. The target goal was 80%. The program exceeded the goal at 84.3%. This measure will next be evaluated in FY16.
- Number of remedies in place or response complete.
- As select portions of sites or complete sites meet their remedial action goals, the risk to human health and the environment is reduced to within acceptable levels and properties are able to be used within a community without fear of increasing cancer risk or further degrading the environment.

History

Funding for the program has been relatively stable in nominal terms, although program scope has increased. USACE began managing FUSRAP in FY98 and the current program performance measures were developed in 2004. In FY05, the program received \$24 million above the President's Budget. That year performance measure targets were exceeded in four categories.

Table 1: FUSRAP Funding and Performance History

<i>Fiscal Year</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Appropriation (\$ Millions)	\$139	\$164	\$139	\$139	\$140	\$140
Number of Records of Decision (RODs) signed	9	3	2	2	2	3
Remedial Investigations completed	21	5	4	0	2	2
Action Memos signed	3	0	1	0	0	0
Cubic yardage of contaminated material removed (in thousand cubic yards)	2,927	243	225	186	153.7	105
Total cost of disposal of contaminated material	\$675	NE	NE	NE	NE	\$600
Individual Properties returned to beneficial use	65	5	15	27	40	52
Cumulative Funding expended on cleanup rather than studies	77%	NE	NE	NE	84.3%	NE
Remedies in place or response complete	4	2	0	3	2	1

The program met or exceeded six of seven performance measure targets set for FY08. One additional target was not measured in FY08 and will not be measured until the conclusion of FY09 (Total cost of disposal of contaminated material). In FY08 one target was not met because USACE was unable to complete the review process for the Harshaw Record of Decision. Also, USACE has found significantly more than the estimated volume of contaminated materials on several sites. At this time, no Action Memorandums are planned for any of these sites. However, this performance measure may change, pending the results of Remedial Investigations currently being conducted at some sites.

Project Spotlight: Maywood Chemical Company Superfund Site

District: New York District

Location: Maywood, New Jersey
(20 miles north of Newark adjacent to
Interstate 80 and State Route 17)

Link: www.fusrapmaywood.com



The Maywood site is on the EPA's Superfund National Priorities List. The site is 40 acres with 88 residential, commercial and industrial properties. There are approximately 281,000 cubic yards of subsurface contaminated material containing thorium-232, radium-226, and uranium-238. USACE is working under the Federal Facilities Agreement (FFA) signed by Department of Energy (DOE) and EPA, while negotiating a USACE/EPA FFA. About 25 percent of the land is federally owned and is being used as a cleanup staging area. USACE completed potentially responsible party (PRP) negotiations through the Department of Justice with the Stepan Company. The Stepan Company, operating a chemical factory, and Sears, operating a large distribution warehouse, occupy part of the site. The clean-up process began in the mid-1980s with about a third of the properties. USACE remediated 23 of an additional 39 remediated properties by FY00 based on a 1994 DOE Engineering Evaluation/Cost Analysis (EE/CA). After FY00, USACE completed a Remedial Investigation/Feasibility Study/Proposed Plan, Record of Decision, Remedial Design (RI/FS/PP/ROD/RD) for the remainder. USACE also prepared an EE/CA for an interim removal action for 10 commercial properties impacted by the New Jersey Department of Transportation projects. USACE also initiated remedial action for the remainder soils and this remaining cleanup plan is estimated to cost approximately \$500 Million beyond FY09.

Base Funding and Performance

The five-year funding would enable the program to have seven individual portions (operable units) completed, as shown in the following table. These figures do not include adjustments for inflation or labor costs. Transportation costs have been increasing in recent years at a rate greater than inflation due to the increase in fuel costs and the demand for rail lines and rail cars; thus, reducing buying power. The table below shows the program with respective performance measures.

Work plans in FY10 and out-years will be developed by setting the following priorities:

- health & safety issues (evaluation and management of site risk)
- legal requirements
- program goal of closing out sites.

Table 2: FUSRAP Five-Year Base Funding Plan and Performance

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Appropriation (\$ Millions)	\$ 134	\$ 136	\$ 136	\$ 139	\$ 144
Number of RODs signed	3	2	2	1	1
Remedial Investigations completed	2	1	1	1	0
Action Memos signed	0	0	0	0	0
Cubic yardage of contaminated material removed (in thousand cubic yards)	105	110	110	115	120
Total cost of disposal of contaminated material	\$ 600	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
Individual Properties returned to beneficial use (annually)	12	4	4	5	4
Cumulative Funding expended on cleanup rather than studies	81%	82%	82%	83%	83%
Remedies in place or response complete	1	1	1	2	2
<i>Source: Information developed by CECW-IN during FY10 budget preparation. "NE" means not evaluated.</i>					

Base Plan Initiatives

- **Coordination with other agencies on disposal contracts:** Transportation and disposal remain a large percentage of project costs. USACE is working to coordinate disposal requirements with the Department of Energy (DOE) and the Department of Defense (DOD) executive agent for radioactive waste disposal in order to reduce disposal costs.
- **Risk-informed waste management:** USACE is working with the Nuclear Regulatory Commission (NRC) to find ways to manage waste according to a material's risk to the public, workers, and the environment, rather than by its pedigree or origin. This is per recent recommendations from the National Academies of Science.

- **Stakeholder buy-in on program goals:**
 - USACE is working to focus more site specific and national stakeholder attention on the overall program, the goals of protecting the public, and closing out sites. USACE is working to show how individual site decisions impact this goal.
 - USACE continues to coordinate with the Department of Energy's (DOE) Legacy Management (LM) GOAL 4: *Management of legacy land and assets, emphasizing protective real and personal property reuse and disposition*. DOE's goal is to increase the percentage of LM managed federal property in beneficial reuse, which would decrease management costs. Four DOE properties are being managed and remediated by USACE under FUSRAP.
 - USACE is coordinating with the Nuclear Regulatory Commission (NRC) on four sites that will help them to meet their license termination strategic goal.

Enhanced Funding and Performance

Projects would be accelerated with enhanced funding. If the program were to receive funding as projected in the Enhanced Plan Scenario for FY10 – FY14, 11 remedies would be completed as shown in the following table. Some contracts for disposal of radioactive materials are expiring in FY09 and prices are expected to increase significantly. The increased funding level for FY10 would enable projects to take better advantage of the remaining disposal capacity on current contracts. The program for the five years and respective performance measures are shown in table below.

Table 3: FUSRAP Five-Year Enhanced Funding Plan and Performance

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Appropriation (\$ Millions)	\$ 144	\$ 148	\$ 152	\$ 157	\$ 162
Number of RODs signed	3	1	2	2	1
Remedial Investigations completed	2	1	1	1	0
Action Memos signed	0	0	0	0	0
Cubic yardage of contaminated material removed (in thousand cubic yards)	130	135	145	148	165
Total cost of disposal of contaminated material	\$ 600	NE	NE	NE	NE
Individual Properties returned to beneficial use	5	7	6	7	9
Cumulative Funding expended on cleanup rather than studies	81%	82%	83%	83%	84%
Remedies in place or response complete	1	2	2	2	2
<i>Source: Information developed by CECW-IN during FY10 budget preparation. "NE" means not evaluated.</i>					

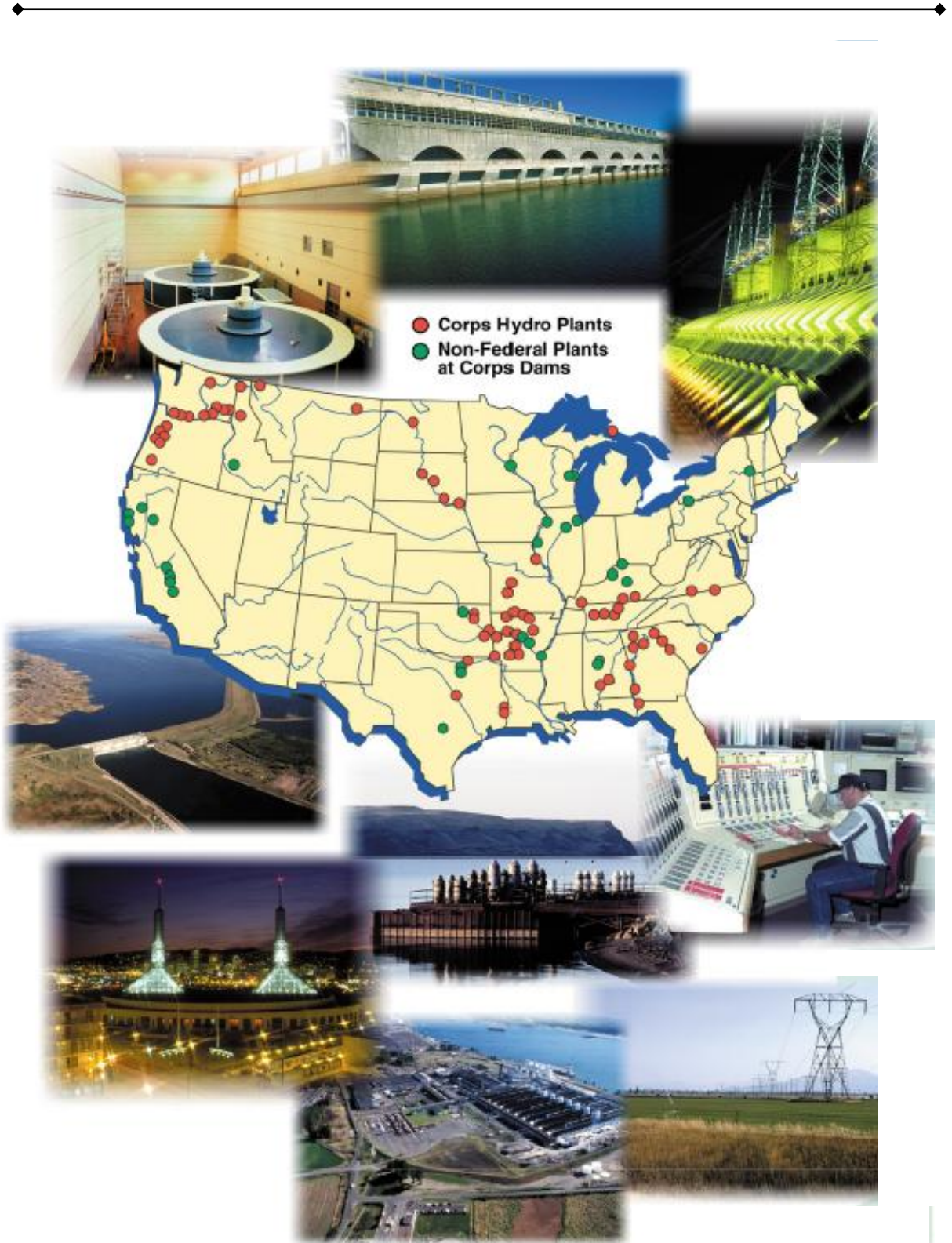
Enhanced Plan Initiatives

- Iowa Army Ammunition Plant: Increases funds at a National Priorities List (NPL) site and shows good faith under the recent Federal Facilities Agreement in place with the state of Iowa, EPA, & DOE.
- Maywood Site in New Jersey: Accelerates completion of three Nuclear Regulatory Commission (NRC) licensed pits.
- Shallow Land Disposal Area in Pennsylvania: Accelerates soil removal completion.
- Linde Site in Tonawanda, New York: Accelerates soil removal completion.
- Sylvania Corning Plant in New York: Advances work on the remedial investigation.
- St. Louis Airport Vicinity Properties in Missouri: Accelerates completion of soil removal and returns numerous private properties to beneficial use.

Potential Work with “Wedge Money”

The FUSRAP Program is not included in the assumptions for potential wedge funding in this Five Year Development Plan.

Hydropower



Hydropower



-Chief Joseph Dam on the Columbia River, WA

Key Statistics

- ❖ There are 75 power plants at USACE dams totaling a rated capacity of 20,475 Megawatts (MW), and a maximum capability of 22,900 MW
- ❖ Own and operate 350 hydroelectric units that represents 24% of the nations hydropower capability and 3% of the total electric capability
- ❖ USACE hydropower plants produce over 70 billion kilowatt-hours of average annual energy

- ❖ Hydroelectric power sales generate over \$4 billion in gross annual revenue
- ❖ 90 non-federal power plants are Federal Energy Regulatory Commission (FERC) licensed to operate at USACE dams representing about 2,300 MW of installed capacity

Accomplishments

- Continued improvements on a risk matrix to quantify infrastructure risk exposure and make more risk-informed budgeting decisions in FY11
- Completed Engineering Regulation and Engineering Pamphlet that provides policy guidance for USACE Districts to meet Federal Energy Regulatory Commission's Electric Reliability Compliance standards
- Developed Baseline Recurring O&M Costs for each hydropower project to determine the minimum operating costs for budgeting purposes
- Collaborated with the Bureau of Reclamation and the Department of Energy on a hydropower resource assessment study to identify existing hydropower development potential
- Obligated \$215 million in American Recovery and Reinvestment Act funding for hydropower O&M projects
- Established a Hydropower Modernization Initiative to develop a prioritization tool for hydropower major rehabilitations

Future Challenges

The primary challenges are related to asset management. Aging infrastructure and constrained funding for operating, maintaining, and replacing hydropower assets are difficult to balance. Due to the current state of the infrastructure, program performance measures have consistently been below industry standards for the previous nine operating years, except in the Pacific Northwest, where Bonneville Power Administration directly finances operation and maintenance and infrastructure modernization. The key challenge to the program is incrementally improving program performance by targeting finite resources at the highest return projects over the next five years. Additional challenges in meeting new FERC electric reliability compliance standards and maintaining an adequately trained technical workforce.

Program History and Performance

The Hydropower Business Program supports the Civil Works Strategic Goal 3 and five of its objectives. Five performance measures are used to assess program progress toward meeting the identified goal and objectives.

Strategic Objective 3.1: Improve the efficiency and effectiveness of existing USACE water resources projects.

Performance Measures:

- ❖ **Forced Outage Rate:** This measures system reliability against industry standard. It is the percentage of regions achieving a system-wide annual forced outage rate of 2 percent or less. A region is considered a USACE Major Sub-Command or Division.
- ❖ **Peak Availability Rate:** This measures system reliability. It is the percentage of regions achieving a system-wide availability of 98 percent during peak demand season. A region is considered a USACE Major Sub-Command or Division.
- ❖ **Rate of Compliance to FERC Reliability Standards:** This measures the number of FERC electric reliability standards met or exceeded across all USACE hydropower facilities. It is the percent of Federal Energy Regulatory Commission (FERC) approved electric reliability standards applicable to Generator Owners and Operators in the bulk power system that are met or exceeded. This is a new measure available in FY10.
- ❖ **Amount of generating capacity rated as poor:** This measures the percent of unit generating capacity that has a component of its major power train rated as poor (as a result of a condition assessment with the hydroAMP Conditions Assessment tool). This is a new measure and should be available for FY11.
- ❖ **Meet O&M cost efficiency target:** This is an efficiency measure. It is the percentage of regions whose facilities achieve O&M cost efficiency as measured by cost per megawatt-hour or cost per megawatt, adjusted for unit size, compared to similar hydropower facilities. This is a newer measure and data should be available in FY11.

The total budgeted amount shown in Table 1 does not directly impact Hydropower Program performance measures. For budget years through FY09, approximately 30 to 35 percent of the program’s budgeted amount is funding requirements for Columbia River fish recovery programs in the Pacific Northwest. In FY09, only 67 percent of the total amount in the President’s Budget actually funds projects that directly affected performance measures. Therefore, about 33 percent of the program’s budget in FY09 was not used for hydropower maintenance, operations, or improvements that impact the performance measures.

Table 1: Hydropower Historical Funding and Performance

<i>Fiscal Year</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Total Apporpriation (\$ Millions)	\$185	\$194	\$245	\$285	\$263	\$285	\$291	\$320
Forced Outage (percent)	3.69%	3.73%	4.28%	4.94%	3.98%	4.33%	4.65%	4.50%
Peak Unit Availability (percent)	89.71%	88.58%	87.33%	87.10%	88.47%	86.45%	85.25%	87.10%
O&M Cost Efficiency Benchmark (\$/MWh)	NA	NA	NA	NA	NA	NA	NA	NA
Note: 2008 values for Forced Outage and Peak Unit Availability are estimates. O&M Cost Efficiency data will not be available unit FY08.								
Source: O&M Business Information Link Database								

Project Spotlight: John H. Kerr Dam and Reservoir Power Plant Major Rehabilitation



District: Wilmington District
Location: North Carolina and Virginia
Project: Multipurpose, one of two hydroelectric facilities in the Wilmington District that comprise the Kerr-Philpott system. Seven main generators and turbines with original plant capacity of 225 megawatts.

The John H. Kerr power plant major rehabilitation project is a 10-year effort to rewind all seven generator units to maximum capacity, replace the turbines and main power transformers, and replace or refurbish key electrical and mechanical peripheral equipment in order to improve the overall reliability of the project, reduce operation and maintenance costs, reduce unscheduled repair costs, and provide additional hydropower capacity and power revenues. The power plant, initially placed into operation in 1953, is showing signs of excessive wear of the generators, the peripheral equipment and the turbines, resulting in a loss of efficiency, reduced reliability of the units and lost power output for the units. There is growing concern with project reliability due to malfunctions of oil circuit breakers in the switchyard, for which repair parts are no longer available and must be custom fabricated; frequent leaks in the raw water piping system, which is in extremely poor condition throughout; and the extremely heavy cavitation damage observed in the turbine runner, stay ring and discharge ring of Unit Number 5. Final marketable upgrade generation capacity is to be determined by the Southeastern Power Administration (SEPA) upon completion of the project. However, for now the capacity of the rehabilitated plant will be 265 megawatts, an increase of 40 megawatts above the original plant capacity of 225 megawatts. The total project cost is \$90.0 million, which will be totally reimbursed in the future through the sell of the electric power generated by SEPA. Average annual benefits for hydroelectric power are \$17,485,000.

Base Funding and Performance

Budget priorities include avoiding plant closures, plant safety, increasing the reliable operation of hydropower facilities, assessing and reducing risks of major equipment failures, and quantifying consequences, both economically and operationally, of infrastructure failure. Additionally, improving upon percent of time generating units are available when electrical power is needed the most is another key program priority.

This Base Plan for the Hydropower Program is primarily driven by reducing maintenance backlogs and making investments in major maintenance. Major rehabilitations and replacements are included in this plan. However, the Base Plan does not address all maintenance and investment needs.

Table 2: Hydropower Base Funding by Accounts

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Investigations	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	\$ 30	\$ 30	\$ 29	\$ 30	\$ 30
Operation and Maintenance (O&M) Estimate	\$ 200	\$ 200	\$ 197	\$ 197	\$ 203
Mississippi River and Tributaries (MRT) Total	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 230	\$ 230	\$ 226	\$ 227	\$ 233

Base Plan Initiatives

- Meeting approved Federal Energy Regulatory Commission (FERC) electric reliability standards and ensuring continued compliance. A corporate reliability compliance plan is being reviewed for approval and will be executed during the latter half of FY09 to meet approved FERC reliability standards. As a result of the electrical energy blackout of 2003, the FERC was given the authority to require all users, owners, and operators of facilities connected to the bulk power system to meet mandatory electric reliability standards. Although USACE is protected by sovereign immunity as a federal agency, it has made a commitment to the FERC to voluntarily meet all approved reliability standards within constraints of appropriated resources.
- As part of the infrastructure reliability improvement initiative, risk will be assessed at each hydropower facility. It will measure risk exposure to major equipment breakdown or catastrophic failure and resulting economic and operational consequences, which will drive budget development decisions for FY10 and beyond.
- Starting in FY11, the first phase of the Hydropower Modernization Initiative will fund the start of six major rehabilitation projects. In out years, the second phase of the initiative will fund a long-range strategy to modernize the remaining hydropower facilities as needed and economically justified in a ranking order.
- Continued funding of major rehabilitation John H. Kerr Powerhouse to completion.

Table 3: Hydropower Base Funding and Performance

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Appropriation (\$ Millions)	\$ 230	\$ 230	\$ 226	\$ 227	\$ 233
Forced Outage (percent)	5.0%	5.1%	4.50%	3.95%	3.80%
Peak Unit Availability (percent)	85.60%	86.10%	86.50%	87.00%	87.50%

Enhanced Funding and Performance

Enhanced funding level priorities over this five-year plan would eliminate the program's maintenance backlog and make significant investments in replacement of aged, inefficient and unreliable infrastructure, reducing risk exposure to major component failures. High priority projects identified by low condition indices, high risk factors and significant benefits would be funded under the Hydropower Modernization Initiative in this scenario.

Table 4: Hydropower Enhanced Funding by Accounts

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Investigations	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	\$ 63	\$ 66	\$ 68	\$ 70	\$ 71
Operation and Maintenance (O&M) Estimate	\$ 197	\$ 205	\$ 211	\$ 217	\$ 222
Mississippi River and Tributaries (MRT) Total	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ 260	\$ 271	\$ 279	\$ 287	\$ 293

Initiatives for Enhanced Plan

- Update and start construction on approved major rehabilitation plans
- Continue the Hydropower Modernization Initiative. The key objective is to establish a programmatic approach to prioritizing major powerhouse rehabilitations. A ranking model will be developed based on physical conditions, environmental impacts, plant importance to electrical system, and customer considerations.
- Sustain performance improvements from previous investments: sustain repair for O&M
- Projects could include several generator rewinds and turbine replacements at projects such as the Allatoona in Alabama, Ft. Randall in South Dakota, Webbers Falls in Oklahoma.

Table 5: Hydropower Enhanced Funding and Performance

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Appropriation (\$ Millions)	\$ 260	\$ 271	\$ 279	\$ 287	\$ 293
Forced Outage (percent)	4.80%	4.4%	4.0%	3.8%	3.6%
Peak Unit Availability (percent)	85.60%	87%	87%	88%	90%
Note: All values are estimates					

Potential Work with “Wedge Money”

If the business line modernization initiative is funded for new starts, the funds would be utilized for additional hydropower major rehabilitations with a competitive benefit-to-cost ratio and climate change benefits. While specific funding decisions would be made at that time, several examples of projects that could be considered are Ft. Randall in South Dakota, Barkley and Wolf Creek in Kentucky, Center Hill and Old Hickory in Tennessee, and Allatoona in Georgia.

Regulatory



What Does the Regulatory Program Mean to You?

Just a few of the benefits of an effective regulatory program are:

- Cleaner water;
- A healthier environment;
- More jobs; and
- A stronger economy.



Regulatory



days

- ❖ Acres of Permanent Wetland permitted Fill = 18,800
- ❖ Acres of Wetland avoided = 28,157
- ❖ Acres of wetland mitigation = 43,000

Key Statistics in FY08

- ❖ 70,000 public and private activities authorized
- ❖ 86,000 jurisdictional determinations completed
- ❖ Over 80% of actions authorized by General Permits
- ❖ 82% of General Permits processed < 60



Accomplishments

- New Regulatory Program Standard Operating Practices completed and published July 2009
- Issued revised guidance on jurisdiction to clarify definitions of adjacency, TNWs and relevant reach. Issued RGL 08-02 to provide landowners the opportunity to request either an approved JD or to request a quicker preliminary JD, when appropriate.
- Regulatory interactive website (AVATAR) deployed on Headquarters and Jacksonville District web sites
- 6 Regional Delineation Manuals published, made significant advancement on the remaining 4
- Operation and Maintenance Business Link (OMBIL) Regulatory Module (ORM) 2 database was upgraded.

Entered into an interagency MOU with DOI and EPA to implement an action plan to strengthen the environmental review of surface coal mining activities in Appalachia.

Future Challenges

The Regulatory program continues to be scrutinized as development pressures mount and national public awareness of the aquatic environment continues to rise. Sensitivity to wetlands has resulted in greater direct input from the public and environmental interest groups, leading to greater complexity and controversy in the review of permit proposals. As the complexities grow, the delays in making permit decisions increase.

Confusion created by the Supreme Court decisions in 2001 and 2007 continues. These decisions have caused a significant increase in workload associated with field visits, documentation and coordination on jurisdictional determinations and resulted in additional time delays for decisions on permit applications. The estimated annual cost to the program is \$30 million; these activities must compete with other, baseline activities for finite resources.

- Issuance of New Regulations: USACE Permit Processing Regulations (1986 regulations) and Historic Properties regulations are 20 years old, and in need of reissuance to incorporate current standards and practices, and update policies. Many programmatic inconsistencies and inefficiencies would be addressed via issuing new regulations.
- Continued advancements of the OMBIL Regulatory Module, version 2 (ORM 2) database is a third critical challenge. ORM 2 is a webbased, geospatial data base that tracks the regulatory processes. ORM2 has been deployed in all districts. Historic data clean up and standard data reporting and standard operation procedures continue to be developed to ensure consistent and accurate reporting that reflects program accomplishments in all areas.
- USACE will continue to leverage resources and opportunities for aquatic resource protection on a watershed basis with other federal agencies, states and local governments. This approach will be important as many state and local governments are experiencing difficult economic situations. USACE will continue to protect aquatic resources and develop general permits to streamline reviews and eliminate duplication among regulatory agencies.

Program History and Performance

Strategic Plan Goal 2: Develop Sound Water Resource Solutions, Sub-objective 2c: Improve Regulatory process to balance development and environmental sustainability; achieve greater consistency and streamline systems; and improve responsiveness and efficiency in decision making directly relate to the Regulatory Program and influence the development of performance measures for the Regulatory Program. The eight performance measures were developed to greatly improve the implementation of the Regulatory Program nationally resulting in increased consistency, improved streamlining and efficiency, and better protection of the aquatic environment, with the overall result of well balanced decisions, which are also more responsive to customer needs. USACEs' Regulatory program has developed three specific strategic goals that are directly linked to our priorities.

Strategic Regulatory Objective 1: No Net Loss of Aquatic Resources

Strategic Regulatory Objective 2: Avoidance and Minimization of Impacts to Aquatic Resources

Strategic Regulatory Objective 3: Expedite Permit Processing

Performance Measures

USACE measures the acres of wetlands impacted, avoided, and mitigated to confirm that the three goals are being met. However, to confirm that these goals are being met, USACE defined eight performance measures, which are designed to be measured quickly and easily while providing data on the goals. The XX below indicate a blank value; the actual value is in the tables below.

- ❖ **Individual Permit Compliance:** USACE shall complete compliance inspections on XX percent of the number of individual permits issued the preceding fiscal year, and select projects from those constructed within the preceding 5 years.
- ❖ **General Permit Compliance:** USACE shall complete compliance inspections of XX percent of the number General Permits (GPs and NWPs) with reporting requirements issued the preceding fiscal year, and select projects from those constructed within the preceding 5 years.
- ❖ **Mitigation Site Compliance:** USACE shall complete field compliance inspections of XX percent of active mitigation sites each fiscal year. Active mitigation sites are those authorized through the permit process and being monitored as part of the permit process but have not met final approval under the permit special conditions.
- ❖ **Mitigation Bank/In Lieu-Fee Compliance:** USACE shall complete compliance inspections/audits on XX percent of active mitigation banks and in lieu fee programs annually.
- ❖ **Resolution of Non-compliance Issues:** USACE will reach resolution on non-compliance with permit conditions and/or mitigation requirements on XX percent of activities determined to be non-compliant at the end of the previous fiscal year and determined to be non-compliant during the current fiscal year.

- ❖ **Resolution of Enforcement Actions:** USACE shall reach resolution on XX percent of all pending enforcement actions (i.e., unauthorized activities) that are unresolved at the end of the previous fiscal year and have been received during the current fiscal year.
- ❖ **General Permit Decisions:** USACE shall reach permit decisions on XX percent of all General permit applications within 60 days.
- ❖ **Individual Permits:** USACE shall reach permit decisions on XX percent of all Standard permits and Letter of Permission (LOPs) within 120 days. This standard shall not include Individual Permits with Formal Endangered Species Act (ESA) Consultations.

USACEs' Regulatory program has been collecting permit and enforcement data over the past 15 years. Compliance data has been collected only for the last four years in a newer database. A summary of the historic funding and performance data is shown in Table 1.

Table 1: Regulatory Historic Funding and Performance

<i>Fiscal Year</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009 Target</i>
Appropriation (\$ Millions)	NA	\$138	\$139	\$143	\$158	\$159	\$176	\$183
Individual Permit Compliance	21%	18%	16%	14%	14%	11%	22%	10%
General Permit Compliance	7%	6%	5%	5%	7%	7%	7%	5%
Mitigation Compliance	13%	15%	11%	9%	10%	7%	18%	5%
Mitigation Bank Compliance	25%	25%	20%	19%	25%	63%	39%	20%
Non-compliance Resolution	33%	30%	26%	24%	37%	56%	28%	20%
Enforcement Resolution	25%	25%	37%	23%	58%	82%	34%	20%
General Permit processing	90%	88%	85%	85%	82%	80%	82%	75%
Individual Permit Processing	65%	58%	61%	61%	61%	53%	51%	50%

Project Spotlight: Regulatory Standard Operating Procedures

The Regulatory SOP was first published in 1999. In July, the Regulatory CoP updated the SOP to reflect the numerous changes in the program resulting from Supreme Court cases and new regulations. The SOP highlights existing policies and procedures to be used in reviewing applications for Department of the Army (DA) permits under Section 404 of the Clean Water Act (CWA), Section 10 of the Rivers and Harbors Act (RHA) of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972. This document is intended to be used as a tool for project managers to provide clarification of regulations and to re-emphasize important aspects of the regulations and guidance.

One of the biggest goals in our program this year, has been to provide stability in response to several years of challenging changes, including the *Rapanos-Carabell* U.S. Supreme Court decision, litigation in association with surface mining activities and jurisdictional challenges, issuance of the mitigation rule, and continued implementation of our database, the Operations and Maintenance Business Information Link Regulatory Module (ORM)). As we work to enhance stability of our program, we are also striving to improve our efficiency, effectiveness, and outreach to the public. Specifically in 2009, we have taken great strides in association with the challenge to conduct enhanced evaluations of coal mining projects in the Appalachian region of the country, including our participation in an interagency memorandum of understanding (MOU) signed in June 2009 by USACE, EPA, and the DOI. In addition to these efforts, USACE continues to: strive for consistent implementation of the mitigation rule that became effective in 2008; collaborate with other federal agencies, states, stakeholders, and the public; make jurisdictional determinations (JDs) pursuant to the *Rapanos-Carabell* Supreme Court decision; and provide technical assistance to the field, specifically in the form of Regional Supplements to the 1987 Wetland Delineation Manual. We continue to reach out to the public to gather information that will enhance the decisionmaking process and inform the public about our role in protecting aquatic resources, while making fair and reasonable permit decisions.

Base Funding and Performance

The budget for FY10 funding is \$190 million, which is a \$10 million funding increase over the 2009 level. It would result in a static level of performance for each of the eight performance measures. With recent national issues concerning mining, mandated regulatory boundary changes and potential changes to the Clean Water Act, the increase in funding in FY10 does not cover the these needs. Targeted manpower increases and programmatic activities will be executed where needed most. This added workload and changes to the program will continue to pose a significant challenge on Permit Managers to meet customer demands for timely permit decisions. The initial funding level would allow continued program work, but at a decreased level of productivity and timeliness, and would not provide funds to initiate or continue strategic objectives for the program, including watershed studies, new SAMPs (Special Area Management Plans), and new State Programmatic General Permits (SPGP's). The performance level for each of the measures is shown below.

The base plan program begins in FY10 with \$190 million, with only minimal increases each year. All funds will be used to try to maintain performance by keeping personnel on board with only cost of living increases; the number of permit managers will remain static or decline over the five-year period and performance targets will continued to be lowered as a result of less manpower to execute the work. This will lead to increasing permit processing times, fewer permits being issued, and lower performance across all objectives as illustrated in Table 2.

Table 2: Regulatory Base Funding and Performance

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Appropriation (\$ Millions)	\$ 190	\$ 193	\$ 193	\$ 196	\$ 204
Individual Permit Compliance	10%	5%	5%	5%	0%
General Permit Compliance	5%	5%	5%	5%	0%
Mitigation Compliance	15%	10%	5%	5%	0%
Mitigation Bank Compliance	25%	15%	10%	10%	0%
Non-compliance Resolution	20%	15%	10%	10%	0%
Enforcement Resolution	20%	15%	10%	10%	0%
General Permit processing	75%	65%	60%	60%	25%
Individual Permit Processing	50%	45%	45%	45%	45%

Enhanced Funding and Performance

The additional funding would be used to accelerate permit processing, compliance and enforcement activities, and jurisdictional determinations.

The enhanced plan program funding level for FY10 is \$210 million. For this level of funding, the program is in a better position to improve performance steadily, while addressing new workload requirements in response to the Carabell-Rapanos decision; performance would be projected to reach targets for all performance measures. The performance level for each of the measures is shown in following table.

In addition, funding would be available to start analyzing how to accomplish the watershed planning approach in permit processing and mitigation management. The watershed or systems approach is crucial to the program and meeting performance measures, because it would enable better coordination and collaboration with all parties, improved assessment techniques, and provide on-line access to Regulatory information for all parties. The watershed approach is designed to enable regulators to make more permit decisions faster on a regional basis, and with significantly improved environmental review. The watershed approach components that need to be funded include continued development of analytical tools for the assessment of cumulative impacts and acquisition of spatial data on wetlands that will be used by USACE in conjunction with other federal and state agencies, local governments and the public. Additional funds would

be used for implementation of targeted Regional General Permits (RGPs) State Programmatic General Permits (SPGPs), permit process' where the districts can customize permits specifically to their regional needs and workload and where states are enabled to make permit decisions on a specified subset of activities covered by existing their state programs. This would lead to streamlined permit processes and “one stop shopping” for many common, low impact activities on aquatic resources and an over all reduction in processing times for permits.

The five-year enhanced plan program assumes the program funding starting at \$216 million in 2011 and rising gradually to \$274 million in FY14. As USACE Regulatory program is primarily funded for labor, performance would be expected to be sustained as funding rises slightly below the normal inflation rate (approximately 6 million per year). Table 3 provides estimates of static performance as funding equivalent to the inflation level.

Initiatives for Enhanced Plan

- Minimize Decrease in Productivity and Performance
- Watershed Approach
- ORM 2 Database Enhancements
- Targeted Hiring Actions
- Targeted Regional Initiatives

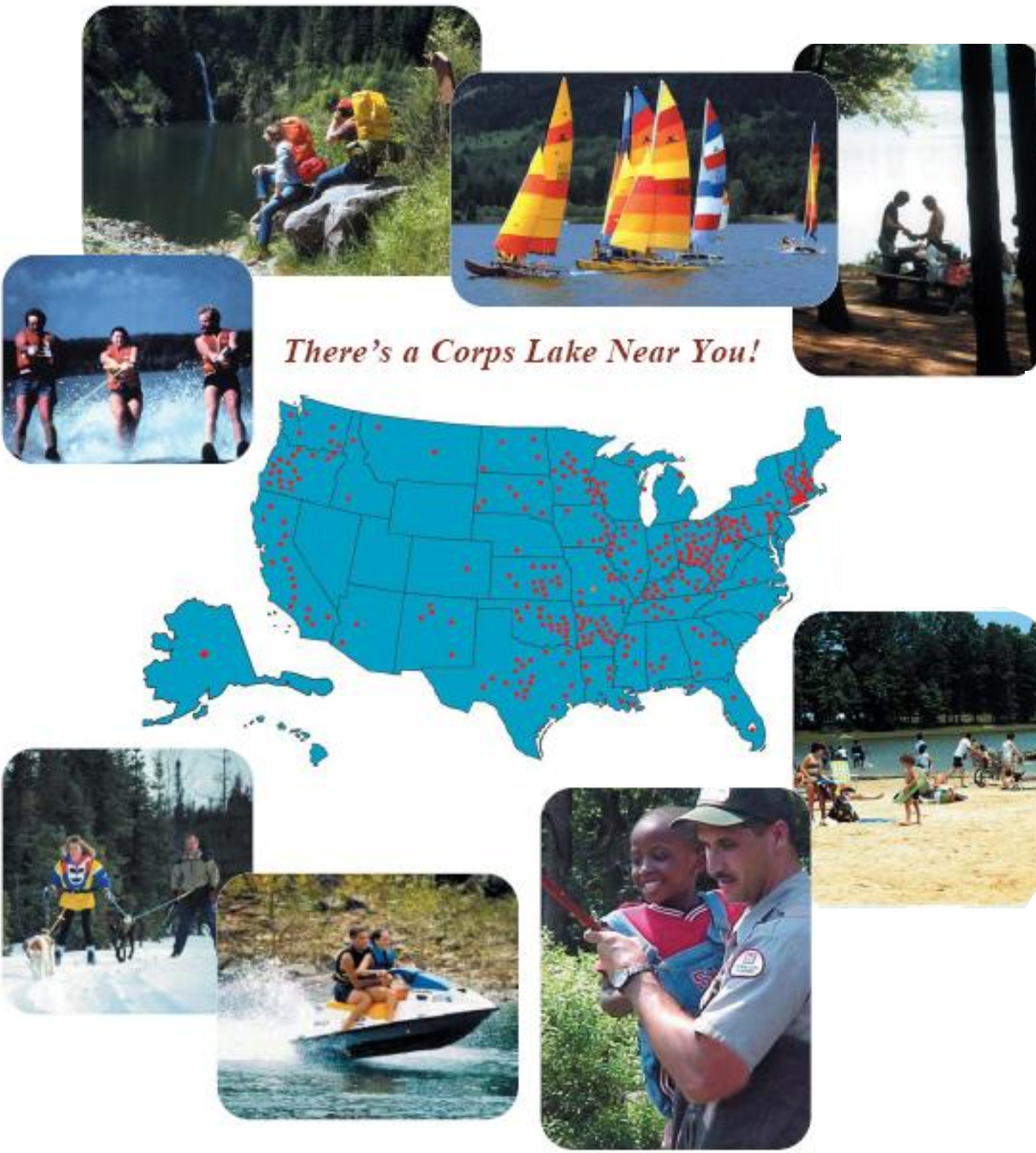
Table 3: Regulatory Enhanced Funding and Performance

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Appropriation (\$ Millions)	\$ 210	\$ 216	\$ 222	\$ 229	\$ 237
Individual Permit Compliance	20%	20%	20%	20%	30%
General Permit Compliance	10%	10%	10%	10%	20%
Mitigation Compliance	20%	20%	20%	20%	30%
Mitigation Bank Compliance	50%	50%	50%	50%	75%
Non-compliance Resolution	30%	30%	30%	30%	40%
Enforcement Resolution	30%	30%	30%	30%	40%
General Permit processing	85%	85%	85%	85%	85%
Individual Permit Processing	50%	70%	70%	70%	70%

Potential Work with “Wedge Money”

The Regulatory Business Program is not included in the assumptions for potential wedge funding in this Five Year Development Plan.

Recreation



Recreation



Key Statistics

- ❖ Largest Federal provider of outdoor recreation services. Over 4,300 recreation areas are located on USACE-managed lands at more than 400 lakes (352 budgeted projects) in 42 states.
 - ❖ Leader in developing partnerships; about 1,800 (43%) of recreation areas are operated and maintained by other entities, such as states and local governments, under a lease or license agreement.
-
- ❖ Water-oriented recreation served 353 million visits at USACE sites and facilities in 2008
 - ❖ 70% of U.S. population lives within 50 miles of a USACE lake offering recreation opportunities

Accomplishments

- 353 million visits per year in 2008 resulted in \$13 billion on total trip expenses and \$5 billion on durable goods including \$8 billion spent by visitors on trips in communities around USACE lakes. This contributes around \$22.4 billion to the national economy with the 'multiplier effect' and supports around 350,000 jobs.
- Recreation opportunities combat one of the nations' most significant health problems: lack of physical activity.
- Recreational programs and activities also help strengthen family ties and friendships; educate the public; provide opportunities for children to develop personal skills, social values, and self-esteem; and improve water safety.

Future Challenges

- All lakes with recreation facilities are struggling to maintain current levels of customer service and park quality in the face of flat budgets.
 - Visitor safety is the highest priority. USACE will continue to commit the necessary resources to programs that provide patrols, water safety education, etc. However, expanding or improving safety programs to accommodate more visitors and add safety is challenging with current funding levels.
 - USACE recreation facilities are 45 years old on average with more than 30% older than 50 years. These facilities need substantial renovations to meet health and safety requirements that would be more costly than annual maintenance.

- Cost increases in contract maintenance, utilities, and operations costs often make service level reductions unavoidable.
- Parks shorten operating seasons, close some day use and camping areas, and reduce visitor services.
- High performing parks need improvements and maintenance. They also need a better funding prioritization process to plan for long-term increase in recreation growth.
- Current law does not allow recreation user fee retention at projects. Enactment of legislative proposals for expanded user fees and fee retention would help to finance recreation infrastructure maintenance and improvement.
- Working with stakeholders and the public to improve business practices and responsiveness to assure quality outdoor recreation is available for future generations

Program History and Performance

The objectives and performance measures for the recreation business program are aligned with Civil Works Goal 3. Performance measures are directed toward three dimensions of the Recreation Program: Customer Service, Asset Management, and Program Efficiency.

Strategic Objective 3.1.7: Provide justified outdoor recreation opportunities in an effective and efficient manner at all USACE-operated water resources projects.

- ❖ **Total NED Benefit Program Efficiency Performance Measure:** contribution of USACE managed parks to National Economic Development (NED) benefits
- ❖ **Benefits/Cost Efficiency Performance Measure:** this is the ratio of NED benefits to actual expenditures or program budget
- ❖ **Cost Recovery Efficiency Performance Measure:** percentage of O&M spending paid through user fees; it is the amount of recreation receipts divided by the recreation program budget.

Strategic Objective 3.1.8: Provide continued outdoor recreation opportunities to meet the needs of present and future generations.

- ❖ **Park Capacity Asset Management Performance Measure:** this is a measure of the capacity of facilities in millions of site days/nights to provide recreation opportunities

Strategic Objective 3.1.9: Provide a safe and healthful outdoor recreation environment for USACE customers.

- ❖ **Health and Safety Services Customer Performance Measure:** the percent of visitors to USACE-managed recreation areas served at acceptable service levels. Activities that impact this measure are facility cleaning, mowing, visitor assistance, ranger patrols, park hosts, reservation services, and repairs.
- ❖ **Facility Condition Asset Management Performance Measure:** this is an average USACE managed recreation area facility condition score, based on a seven point scale 1 = poor to 7 = excellent. Acceptable facility condition standard = 3.5 or better

- ❖ **Facility Service Asset Management Performance Measure:** this is the percent of visitors served at acceptable facility condition standard

The following table presents a summary of the program's funding and performance. Performance information provided in the table is incomplete because the systematic program performance monitoring was initiated until 2004 with the development of Rec-BEST (Budget Evaluation SysTem) to support the budget development process.

Table 1: Recreation Historic Funding and Performance

Fiscal Year	2002	2003	2004	2005	2006	2007	2008	2009
Appropriation (\$ Millions)	\$261	\$274	\$262	\$270	\$268	\$267	\$267	\$271
Visitor Health and Safety Services	NA	NA	NA	51%	50%	49%	48%	47%
Park Capacity (millions of days)	NA	NA	NA	74	74	74	74	74
Facility Condition (Based on seven point scale: 1=poor to 7=excellent)	NA	NA	3.7	3.7	3.7	3.7	3.6	3.6
Facility Service (% of visitors served at 'acceptable' parks)	NA	NA	NA	48%	48%	48%	47%	44%
National Economics Development (NED) Benefits (\$ Millions)	NA	NA	1,223	1,242	1,271	1,353	1,449	1,171
Program Efficiency (Benefit/Cost Ratio)	NA	NA	4.22	4.25	4.46	4.49	4.69	4.32
Cost Recovery (% of total Recreation Receipts to Budget)	13%	14%	16%	17%	17%	16%	15%	16%

Project Spotlight: Partnering at Lake Ouachita, Arkansas

District: Vicksburg

Location: On the Ouachita River near Royal, Arkansas and at Blakely Dam

Project Type: Memorandum of Understanding (MOU) Partnership with the Lake Ouachita Citizen Focus Committee, Denby Bay Coalition, Arkansas Game and Fish Commission and Montgomery County, Arkansas



USACEs' Challenge Partnership Agreement has leveraged funding through partnerships to accomplish needed improvements to natural resources management sites and facilities. Lake Ouachita is one example. Lake Ouachita has crystal-clear waters making the lake a popular site for scuba diving along with numerous camping, fishing, horseback riding, boating, and swimming opportunities. Many of these activities are supported through partnerships including local governments, community groups, volunteers, and other non-federal entities.

Through the efforts of a local partner group, the Denby Bay Coalition, they leveraged USACEs' Handshake Partnership Grant into more than \$800,000 in partner contributions to build a trail. The Denby Bay Coalition has completed 14 miles of the Vista Hiking and Biking Trail. The third trail phase is 95% complete adding 6 more miles. The fourth phase is being investigated and volunteer "Pathfinders" are marking trail routes. This phase will be about 8 miles long connecting into the Crystal Springs Recreation Area. Denby Bay Coalition Members and individual volunteers have put in over 2000 volunteer hours assisting on Vista Trail construction, sign placement, bench placement, and initial trail maintenance.

In conjunction the Vista Trail, local grass root support engaged the Denby Bay Coalition to build a trail designed for the physically challenged. This quickly morphed into a Watchable Wildlife trail designed using Americans with Disabilities Act (ADA) principles. The ADA/Watchable Wildlife Trail is underway and will total 1.5 miles, including an elevated walkway exhibiting a wetlands environment.

Arkansas Game and Fish Commission along with project staff developed the ADA/Watchable Wildlife Elevated Trail (650' long X 6' wide) design plan, with Denby Bay Coalition volunteers currently installing the base support post. Montgomery County received a \$33,600 grant from the Arkansas Highway Department for the trail. The Arkansas Game and Fish Commission officially authorized and issued a \$150,000 grant for installing the elevated portion, and interpretive exhibits for the entire ADA/Watchable Wildlife trail. Through these partnerships, new alliances have been forged with local and state organizations for the betterment of Lake Ouachita, Montgomery County and the customers we serve.

Base Funding and Performance

The recreation program focuses on providing acceptable service levels to visitors at USACE operated parks; however, the funding level will lead to declining service levels. Customer satisfaction is projected to steadily decline from decreasing Visitor Health and Safety Services, Site and Facility Condition, as a result of projected budget shortfalls. As part of customer satisfaction, the program will prevent essential recreation infrastructure loss for disabled visitors and mandated access. However, water safety initiatives will remain unfunded.

In regards to Asset Management, USACE will maintain public outdoor recreation opportunities nationwide with total recreation unit days available near 60 million annually as measured by Park Capacity. This is a reduced availability due to resource constraints. Strategy includes a combination of reduced service levels and reduced recreation opportunities implemented through partial and/or complete closures. The Facility Condition will slightly decline; funding is targeted at critical maintenance activities to keep key recreation infrastructure functioning.

Regarding Program Efficiency, service levels at individual recreation sites will be maintained and/or adjusted to reflect the level of visitation, relative to the cost of such maintenance, at those sites. Program efficiency, as measured by a Benefit/Cost Ratio, will decline under the Base Plan program.

Table 2: Recreation Base Funding by Account and Performance

Fiscal Year	2010	2011	2012	2013	2014
Operation and Maintenance (O&M)	\$ 267	\$ 271	\$ 271	\$ 276	\$ 287
MRT O&M	\$ 16	\$ 16	\$ 16	\$ 17	\$ 17
Appropriation (\$ Millions)	\$ 283	\$ 287	\$ 287	\$ 293	\$ 304
Visitor Health and Safety Services	47%	47%	47%	47%	47%
Park Capacity (millions of days)	74	74	74	74	74
Facility Condition (Based on seven point scale: 1=poor to 7=excellent)	3.6	3.6	3.6	3.6	3.6
Facility Service (% of visitors served at 'acceptable' parks)	45%	47%	47%	47%	47%
National Economics Development (NED) Benefits (\$ Millions)	1,155	1,182	1,182	1,206	1,252
Program Efficiency (Benefit/Cost Ratio)	4.08	4.18	4.13	4.13	4.13
Cost Recovery (% of total Recreation Receipts to Budget)	16%	16%	16%	16%	16%
Note: Includes CAP and Remaining Items					

Base Plan Initiatives

The following initiatives are directed to improve program efficiency, sustainability and customer service:

- The Recreation Program Performance Improvement Initiative (RPPII) is directed toward
 - a) implementing new guidance toward park operations (including potential park closures),
 - b) developing guidance for modernization projects,
 - c) developing a suite of detailed management performance measures to improve program execution, and
 - d) sharing best practices using the Natural Resource Management Gateway to improve operational efficiencies.

- Civil Works Asset Management initiatives for recreation are directed toward optimizing infrastructure investment to support program objectives under the following activities
 - a) annually monitor the condition and utilization of recreation facilities to inform budget decisions, and
 - b) use critical maintenance indicator in Rec-BEST to inform budget decisions.

- A 'Customer Service Performance Measure' initiative will be established to
 - a) benchmark USACE service levels with other agencies and program partners,
 - b) develop minimum service levels (required for public health and safety) below which parks will be closed, and
 - c) review and, if necessary, adjust acceptable levels of service based on the results of items a and b above.

Project Spotlight: Budget Impacts to Operations and Partnerships

District: Vicksburg

Locations: Lakes Ouachita, Greeson, and DeGray, Arkansas in the region about 50 miles southwest of Little Rock.

Lake Ouachita, Greeson, and DeGray are all located within about an 80-mile radius from each other. Lake Ouachita is described in the above project spotlight. Lake Greeson is on the Little Missouri River and has hunting, fishing, camping, swimming and boating opportunities. The lake is a wintering site for bald eagles. A nature trail

allows the visitor to reach a cinnabar mine site that has red colorations from mercury ore. There is also a 31-mile-long cycle trail and the Chimney Rock geological formation. DeGray Lake is on the Caddo River in the foothills of the Ouachita Mountains. It is known for its camping facilities and geological formations; however, visitors also enjoy boating, fishing, swimming and scuba diving. A group camp area, which includes a dining hall and eight sleep shelters, is also available. The project offers a visitor center and a State park with a swimming pool, marina, lodge, and golf course.



–Lake DeGray

Like many USACE lakes, these lakes are facing the challenges of how to allocate limited program resources. Each project is evaluating options to serve as many customers as possible by focusing resources on the parks and campgrounds that receive the highest visitation. Options include reducing the service levels, limiting summer ranger hires, shorten operating seasons, partial area closures, and as a last resort permanent recreation area closures. The Vicksburg District and representatives of Federal, state, and local interests decided to modify services through a stakeholders’ agreement on February 11, 2008. This would reduce costs, and open all Class A and B campgrounds at all three lakes starting on March 1, 2008. The modified services include less frequent trash pickup, janitorial services and grass mowing. Class C and D campgrounds will remain open with no service. Modifications would continue if the summer season can be sustained at these levels.

This operation plan also provides an opportunity for visitors to volunteer at these campgrounds to supplement the modified services. More volunteering and partnership will help keep costs lower



while providing more services. Leasing campgrounds is also being considered to sustain future campground availability. Despite these funding constraints, the Vicksburg District is committed to providing the best recreation opportunity to the visiting public at all USACE managed areas and will continue to do so in the most efficient ways with the resources available.

–Lake Greeson

Enhanced Funding and Performance

The five-year performance projections reported under this scenario are based on estimates provided by field managers in Rec-BEST during the past four years. Visitor Health and Safety Services are expected to remain at the same level resulting from the flat budget after considering inflation. The downward trend in Facility Condition projected under the Base Plan program will be reversed and facility condition will be slowed down as a result of investments in high performing parks. Visitors served at facilities rated at “acceptable” or better will be virtually the same under Facility Service. Service levels at individual recreation sites will be maintained and/or adjusted to reflect the level of visitation, relative to the cost of such maintenance to improve program efficiency. Program efficiency, as measured by B/C Ratio, will also remain flat or decrease slightly due to the deteriorations of park facilities. A combination of reduced service levels and reduced recreation opportunities implemented through partial and/or complete park closures will continue.

Table 3: Recreation Enhanced Funding by Account

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Investigations	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	\$ -	\$ -	\$ -	\$ -	\$ -
Mississippi River and Tributaries (MRT) Project	\$ -	\$ -	\$ -	\$ -	\$ -
Operation and Maintenance (O&M)	\$ 268	\$ 272	\$ 279	\$ 289	\$ 298
MRT O&M	\$ 15	\$ 15	\$ 16	\$ 16	\$ 17
Total	\$ 283	\$ 287	\$ 295	\$ 305	\$ 315
Note: Includes CAP and Remaining Items					

Initiatives for Enhanced Plan

- Improve Visitor Health and Safety Services, such as:
 - Hiring additional temporary park rangers during peak season to conduct water safety programs and increase patrols in beach areas and USACE operated parks.
 - Modernize electrical service at high performing campgrounds
 - Improve operational efficiency
 - Improve access to facilities for disabled visitors
- Surveys to maintain monitoring capability of visitation levels at USACE projects

Table 4: Recreation Enhanced Funding and Performance

Fiscal Year	2010	2011	2012	2013	2014
Appropriation (\$ Millions)	\$ 283	\$ 287	\$ 295	\$ 305	\$ 315
Visitor Health and Safety Services	75%	75%	75%	75%	75%
Park Capacity (millions of days)	74	74	74	74	74
Facility Condition (Based on seven point scale: 1=poor to 7=excellent)	3.6	3.6	3.6	3.6	3.7
Facility Service (% of visitors served at 'acceptable' parks)	43%	47%	47%	47%	47%
National Economics Development (NED) Benefits (\$ Millions)	1,155	1,182	1,185	1,224	1,264
Program Efficiency (Benefit/Cost Ratio)	4.08	4.18	4.18	4.18	4.18
Cost Recovery (% of total Recreation Receipts to Budget)	16%	16%	16%	16%	16%
Note: Includes CAP and Remaining Items					

Potential Work with “Wedge Money”

The Recreation Program is not included in the assumptions for potential wedge funding in this Five Year Development Plan.

Emergency Management



Emergency Management



Key Statistics

- ❖ Completed the repair and restoration of 220 miles of floodwalls and levees by June 1, 2006 caused by Hurricane Katrina
- ❖ Trained 1,200 personnel during FY08 for emergency management work and anticipate training a similar number in FY09.
- ❖ Supported 12 FEMA disaster responses in FY08 and anticipate supporting a similar in FY09

Accomplishments

- Ensure USACE activities are ready, trained and equipped to respond to a broad range of disasters and emergencies.
- Coordinate, plan, and conduct response exercises with key local, state and federal stakeholders/ partners under USACEs' statutory authorities
- Conducted flood fighting/emergency operations (PL 84-99) in Alaska, Washington D.C., Iowa, Illinois, Indiana, Kansas, Kentucky, Maryland, Missouri, North Dakota, Nebraska, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Texas, and Washington during FY08.
- Execution of the May 2007 Supplemental Flood Control and Coastal Emergency (FCCE) Appropriation that funded Louisiana and Mississippi FY06 eligible project repairs, Missouri River and Texas flood infrastructure repairs, and provided Drought Assistance.
- The Critical Infrastructure Protection and Resilience (CIPR) program completed a study focused on a review of the state-of-practice of critical infrastructure security risk assessment, evaluating their effectiveness in addressing security and protection requirements. The study evaluated the comparative advantages and limitations of a number of risk assessment methodologies and identified the requirements for a risk assessment methodology that could support risk-informed decisions considering a wide spectrum of consequences, vulnerabilities, and threats. While each of the models reviewed has merit within a narrow field of use, none has the desirable properties of 1) satisfying the need for a practical approach suitable for

comprehensive portfolio-wide use, and 2) yielding risks results that can be objectively compared to risk results across a portfolio as well as results from other infrastructure sectors.

Future Challenges

- Assessing, managing, and communicating flood risk to the impacted population in understandable terms, and generally improving the nations' resilience to flood events. Additionally, a major challenge remains in how to achieve a sensible balance between our responsibility to inform without increasing terrorist target attractiveness, and our responsibility to protect the public.
- Ongoing levee inventory, inspections, maintenance, and communication are essential. Trees and other woody vegetation can create structural and seepage instabilities, prevent adequate inspection, cause levee failure, and create obstacles to maintenance and flood fighting/flood control activities. Public dialogue is essential to communicate risks and consequences.
- Assessment and quantification of consequences associated with dam failures, levee breaches, or navigation lock disruptions needs consistency measures, particularly regarding the estimation of population at risk, loss of life, and quantification of direct and indirect economic impacts.
- Breaking traditional stakeholder and government agencies molds to create better collaboration and integrated processes for emergency planning
- USACEs' future role in drought assistance is uncertain and may require redefinition
- Maintaining a consistent preparedness level, training and credentialing requirements, and increased rehabilitation costs due to an aging flood control infrastructure.
- Develop common guidance for managing sensitive information involving safety/security issues related to critical infrastructure.

History of Funding and Performance

The emergency management program focuses its support on Civil Works Strategic Goal 4. The underlying purpose of this goal is to manage the risks associated with all hazard types and to increase the responsiveness to disasters under this program in support of Federal, state, and local emergency management efforts. Disaster preparedness and response capabilities are not limited to water-related disasters; it also encompasses a broad range of natural disasters and national emergencies which draw on the engineering skills and management capabilities of the organization. Readiness to respond to disasters and emergency incidents is critical to national security.

Performance Measures

The measures below include CIPR. CIPR was a recently added program to Emergency Management, and evolved from the initial Critical Infrastructure Security Program (CISP) established in 2004. CISP primary focused on the implementation of the Baseline Security Posture at USACE projects. The Baseline Security Posture (BSP), as defined by USACE's Office of Homeland Security, established the initial steps for physical security upgrades for those critical projects initially identified through the Risk Assessment Methodology for Dams (RAM-D) assessment evaluations, and was completed in April 2008.

- ❖ **Planning Response Team Status:** USACE has established designated Planning & Response Teams (PRT) that are organized to provide rapid emergency response for a specific mission area. Percent of time that Planning Response Teams for a given mission area are in "Green" readiness state (trained, fully staffed, ready to deploy).
- ❖ **Planning Response Team Performance:** Percent of time that the performance of the deployed PRT is rated at or above Highly Successful in support of FEMA under the National Response Plan
- ❖ **Flood Response Team Status:** Percent of time that PL 84-99(Flood) Response Teams are in the "Green" readiness state (trained, fully staffed, ready to deploy) at the beginning of flood/hurricane season.
- ❖ **Deployable Tactical Operation Status:** Percent of time that the National Deployable Tactical Operations System equipment and teams are in "Green" readiness status (trained, fully staffed, ready to deploy)
- ❖ **Inspections Performed:** USACE performs repairs of flood control projects damaged by flood or storm under authority of P.L. 84-99. Percent of annual, scheduled inspections performed for all non-Federal Flood Control Works in the Rehabilitation and Inspection Program (RIP), as required by ER 500-1-1. This measure is determined by the percentage of projects damaged during a fiscal year that are repaired prior to the next flood season.
- ❖ **Inspected Project Status:** Under USACE RIP, inspected projects are given condition ratings that characterize the project maintenance condition. Cumulative percent of Federal and non-Federal projects in the RIP with satisfactory ratings (minimally acceptable or higher rating).

- ❖ **Infrastructure Repairs:** Percent of time solutions are developed and implemented (either repaired to pre-flood conditions or possible non-structural alternative) prior to the next flood season. The five year plan only covers preparedness activities therefore accomplishment of this function is completely dependent on supplemental appropriations.
- ❖ **Effective execution of the National Training Program (USACE-wide) readiness life cycle.** Funding only covers minimum baseline training, new requirements would be impacted.
- ❖ **CIPR Consequence-based Portfolio Screening:** Implement portfolio-wide consequence-based prioritization to identify critical facilities using the Dams Sector Consequence-Based Topp Screen (CTS) methodology.
- ❖ **Regional All-Hazards Exercises:** Implement multi-jurisdictional efforts aimed at enhancing resilience and preparedness within a region.

The Emergency Management program gets most of its funding from the Flood Control and Coastal Emergency (FCCE) account. Unlike other Civil Works accounts for which funding requirements are programmed based on scheduled work, the FCCE account can only project funding requirements for preparedness activities. The frequency and magnitude of emergency events determines the resources needed for actual emergency response in any given fiscal year, as does the obligation rate of FCCE funds. There has not been a regular appropriation for the Flood Control and Coastal Emergencies Account since the 2003 appropriation of \$14.9 million. Performance measures for this program were established in FY04. Table 1 below shows program funding and performance measures for FY04 through FY08.

Table 1: Funding and Performance History

<i>Fiscal Year</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009 Target</i>
Flood Control and Coastal Emergency (FCCE) Regular Appropriation (\$ Millions)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Flood Control and Coastal Emergency Supplemental Appropriation (\$ Millions)	\$ -	\$348	\$5,408	\$1,561	\$3,608	\$754
Operation and Maintenance Regular Appropriation (\$ Millions)	\$5.60	\$5	\$5	\$5	\$4.70	\$5.458
Operation and Maintenance Supplemental Appropriation (\$ Millions)	\$ -	\$ -	\$ -	\$ -		
Total Appropriations (\$ Millions)	\$5.60	\$353	\$5,413	\$1,566	\$3,613	\$759
Planning Response Team Status (% of time in "Green" readiness state for a given mission)	93%	82%	92%	72%	92%	91%
Planning Response Team Performance (% of time team is rated highly successful)	93%	86%	95%	100%	90%	91%
Flood Response Team Status (% of time in "Green" readiness state for a given mission)	96%	92%	92%	75%	90%	93%
Deployable Tactical Operations Status (% of time in "Green" readiness state)	NA	NA	92%	93%	92%	93%
Inspections Performed (% of scheduled inspections performed)	90%	96%	93%	97%	94%	93%
Inspected Project Status (% of inspections with satisfactory rating)	93%	94%	95%	90%	92%	91%
Infrastructure Repair (% of time solutions are implemented prior to the next flood season)	75%	92%	65%	29%	90%	35%
Effective execution of the National Training Program (USACE-wide) readiness life cycle	92%	94%	74%	83%	90%	93%

Project Spotlight: Hurricane Storm Damage Risk Reduction System

Location: Greater New Orleans
Metropolitan Area
District: New Orleans District



Under USACE Public Law (PL) 84-99 authority, a task force was established in the aftermath of Hurricane Katrina, September 2005. This was to repair the Greater New Orleans Federal hurricane and flood protection system from Hurricane Katrina damages to pre-storm conditions by 1 June 2006. The repair and restoration of 220 miles of floodwalls and levees has been completed to date. The repaired system included: 2.3 miles of new floodwalls, 22.7 miles of new levees, 195.5 miles of scour repair, 3 interim gated closure structures, and 4 closure structure repairs. Originally, USACE had identified 169 miles of levees and floodwalls to be repaired and restored. By the time the repairs and new construction was finished, 220 miles of levees and floodwalls had been repaired or restored. In addition, floodwall deficiencies were corrected and un-constructed portions of authorized projects were accelerated. USACE is currently undertaking work to provide the authorized level of protection for existing project facilities, and then to improve the system to provide 100-year storm protection.

Base Plan and Performance

The funding level is \$55 million in FY10 and includes Base Plan funding FCCE preparedness (\$41 million), NEPP programs (\$7 million), and the CISP/Facility Protection Program (\$7 million). Consequently, this amount represents baseline readiness, and \$0 for response and recovery costs activities such as emergency operations during flood and hurricane seasons; repairs to flood damage reduction and hurricane shore protection projects damaged by floods or storms; drought assistance; and advance measures activities. Funding for response and recovery activities relies on supplemental appropriations. USACE has broad authority to transfer funds from other accounts to address emergency response situations, but response and recovery funding needs that exceed this reprogramming authority must rely on supplemental appropriations, which may also be used to repay funds transferred from other activities. Constrained funding is projected to result in a slight downward trend in program performance for actions related to preparedness activities. Other impacted preparedness activities include: additional training and exercises for the planning and response teams and for Public Law (PL) 84-99 training.

Table 2: Emergency Management Base Plan Funding by Account

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Flood Control and Coastal Emergency (FCCE) Regular Appropriation (\$ Millions)	\$ 41	\$ 42	\$ 42	\$ 42	\$ 43
Operation and Maintenance Regular Appropriation (\$ Millions)	\$ 14	\$ 14	\$ 14	\$ 15	\$ 16
Total (\$ Thousands)	\$ 55	\$ 56	\$ 56	\$ 57	\$ 59
Note: Supplemental Appropriation is not included as it is funded during certain events.					

Base Plan Highlights

- Coordination, planning, limited training, and conducting response exercises with key local, State and Federal stakeholders/partners under USACE statutory authorities and in support of the Federal Emergency Management Agency (FEMA), Department of Homeland Security
- Maintain and upgrade Deployable Tactical Operating System (DTOS) units, purchase two additional Rapid Response Vehicles (RRVs) and purchase equipment over the five-year period.
- Purchase and stockpiling of critical supplies and equipment and support facilities for Emergency Operations Centers. Readiness funding would pay personnel costs for Emergency Management personnel assigned to centers, Crisis Management Teams, Crisis Action Teams, Regional Response Coordination Centers, Planning and Response Teams, Special Cadres, and Levee Inspection Teams.
- Continuity of Operations Plan (COOP), Continuity of Government (COG) and critical Catastrophic Response Planning Initiatives.
- CISP/Facility Protection:
 - Analyze economic impacts of infrastructure interdependencies associated with an inland waterway system interruption
 - Develop dam security exercise program consistent with the Homeland Security Exercise Evaluation Program (HSEEP)
 - Implement of a risk assessment and management framework at administration buildings and laboratories, in coordination with USACEs’ Provost Marshal Office
 - Research and development, simulation, modeling, and analysis initiatives supporting critical infrastructure protection, blast mitigation, and resiliency of dams, navigation locks, and levees
 - Increase in security guard force requirements at projects resulting from changes to the Nation’s security levels

Table 3: Emergency Management Base Funding and Performance Measures

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Total Appropriations (\$ Millions)	\$ 55	\$ 56	\$ 56	\$ 57	\$ 59
Planning Response Team Status (% of time in “Green” readiness state for a given mission)	87%	84%	81%	78%	78%
Planning Response Team Performance (% of time team is rated highly successful)	87%	84%	81%	78%	78%
Flood Response Team Status (% of time in “Green” readiness state for a given mission)	87%	84%	81%	78%	78%
Deployable Tactical Operations Status (% of time in “Green” readiness state)	89%	86%	83%	80%	80%
Inspections Performed (% of scheduled inspections performed)	91%	88%	85%	82%	82%
Inspected Project Status (% of inspections with satisfactory rating)	89%	86%	83%	80%	80%
Infrastructure Repair (% of time solutions are implemented prior to the next flood season)	35%	35%	35%	35%	35%
Effective execution of the National Training Program (USACE-wide) readiness life cycle	67%	64%	62%	60%	60%

Note: The five year plan only covers preparedness activities therefore the above measures reflect accomplishments from supplemental appropriations. Regular appropriations only covers minimum baseline training; therefore, any, new requirements would be impacted. Performance Measures only apply to FCCE and NEPP. Other performance measures are being developed for the funds allocated to CISP.

Enhanced Funding and Performance

Similar to the Base Plan scenario, the enhanced budget includes funding the initial FCCE preparedness program, NEPP program, and CISP/Facility Protection Program. Consequently, this amount represents baseline preparedness or readiness and \$0 for response and recovery costs. Response and recovery includes emergency operations during flood and hurricane seasons; repairs to flood damage reduction and hurricane shore protection projects damaged by floods or storms; drought assistance; and advance measures activities.

From FY10 through FY14, the small increase would provide for modest improvements to the preparedness program, such as additional training and exercises for the planning and response teams, PL 84-99 training, and updating USACEs’ ENGLink system. Funding for response and recovery activities relies on supplemental appropriation which can delay timely response and recovery activities.

Table 4: Emergency Management Enhanced Funding by Accounts

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Flood Control and Coastal Emergency (FCCE) Regular Appropriation (\$ Millions)	\$ 80	\$ 82	\$ 85	\$ 87	\$ 90
Operation and Maintenance Regular Appropriation (\$ Millions)	\$ 13	\$ 14	\$ 15	\$ 17	\$ 18
Total (\$ Thousands)	\$ 93	\$ 96	\$ 100	\$ 104	\$ 108
Note: Supplemental Appropriation is not included as it is funded during certain events.					

Enhanced Plan Highlights

- Coordination, planning, limited training, and conducting response exercises with key local, State and Federal stakeholders/partners under USACE statutory authorities and in support of the Federal Emergency Management Agency (FEMA), Department of Homeland Security
- Maintain and upgrade Deployable Tactical Operating System (DTOS) units, purchase two additional Rapid Response Vehicles (RRVs) and purchase equipment over the five-year period.
- Purchase and stockpiling of critical supplies and equipment and support facilities for Emergency Operations Centers. Readiness funding would pay personnel costs for Emergency Management personnel assigned to centers, Crisis Management Teams, Crisis Action Teams, Regional Response Coordination Centers, Planning and Response Teams, Special Cadres, and Levee Inspection Teams.
- Continuity of Operations Plan (COOP), Continuity of Government (COG) and critical Catastrophic Response Planning Initiatives.
- CISP/Facility Protection:
 - Analyze economic impacts of infrastructure interdependencies associated with an inland waterway system interruption
 - Develop dam security exercise program consistent with the Homeland Security Exercise Evaluation Program (HSEEP)
 - Implement of a risk assessment and management framework at administration buildings and laboratories, in coordination with the USACEs' Provost Marshal Office
 - Research and development, simulation, modeling, and analysis initiatives supporting critical infrastructure protection, blast mitigation, and resiliency of dams, navigation locks, and levees
 - Increase in security guard force requirements at projects resulting from changes to the Nation's security levels

Table 5: Emergency Management Enhanced Funding and Performance

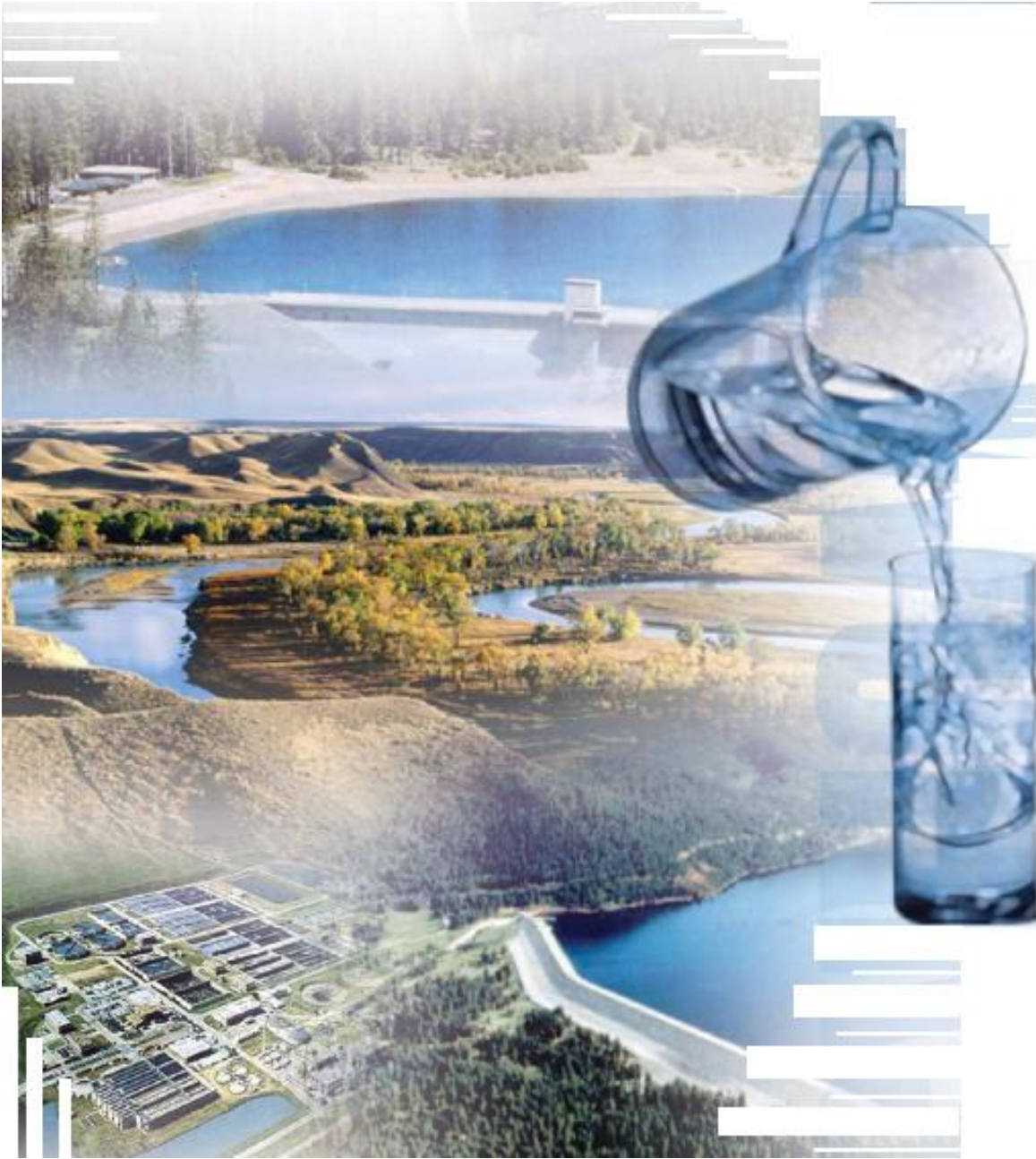
<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Total Appropriations (\$ Millions)	\$ 93	\$ 96	\$ 100	\$ 104	\$ 108
Planning Response Team Status (% of time in “Green” readiness state for a given mission)	90%	91%	91%	92%	92%
Planning Response Team Performance (% of time team is rated highly successful)	91%	91%	92%	92%	92%
Flood Response Team Status (% of time in “Green” readiness state for a given mission)	90%	91%	91%	92%	92%
Deployable Tactical Operations Status (% of time in “Green” readiness state)	93%	93%	94%	95%	95%
Inspections Performed (% of scheduled inspections performed)	94%	95%	95%	96%	96%
Inspected Project Status (% of inspections with satisfactory rating)	92%	93%	93%	94%	94%
Infrastructure Repair (% of time solutions are implemented prior to the next flood season)	57%	54%	52%	50%	50%
Effective execution of the National Training Program (USACE-wide) readiness life cycle	71%	72%	73%	74%	74%

Note: The five year plan only covers preparedness activities therefore accomplishment of this function is completely dependent on supplemental appropriations. Funding only covers minimum baseline training, new requirements would be impacted. Performance Measures only apply to FCCE and NEPP as other performance measures are being developed for the funds allocated to CISP.

Potential Work with “Wedge Money”

The Emergency Management Program is not included in the assumptions for potential wedge funding in this Five Year Development Plan.

Water Supply



Water Supply



-Lost Creek in Oregon

Key Statistics

- ❖ 11.1 million acre-feet of storage space
- ❖ Water storage located in 132 multi-purpose reservoirs in 26 states
- ❖ 316 Water Supply Agreements
- ❖ \$1.5 billion in project costs being returned to the U.S. Treasury

Accomplishments

- Provide storage space sufficient to meet about 18% of the nations personal household needs
- About 94% of total storage allocated to water supply is under repayment agreements.
- Return revenues to the U.S. Treasury through repayment agreements for project construction costs as well as annual operation and maintenance expense. Since becoming a business program in fiscal year 2005, the average amount collected for principal, interest and O&M has been about \$20 million dollars per year. At a budget of about \$4 million per year, the program more than pays for itself.

Future Challenges

- Meeting the increasing competition for available water supplies as a result of rapid population and economic growth, including through reallocation of existing storage.
- Meeting this growing demand will require more efficient use of existing water supplies.
- Primacy over water supply development and management has been and will continue to reside with states and localities.
- Continue to play a significant role in helping non-Federal entities to secure and manage water supplies, including assisting states and other non-Federal interests in the preparation of comprehensive water resources development and drought management plans.

- Establishing and updating water supply agreements with local entities withdrawing water from USACE reservoirs.

History of Funding and Performance

In partnership with non-Federal water management plans and consistent with law and policy, manage USACE reservoirs to provide water supply storage in a cost-efficient and environmentally responsible manner. Performance is measured by (1) acre-feet of storage under contract versus acre-feet available and (2) percent of costs covered by revenues returned to the U.S. Treasury.

Water supply has been reported in appropriations accounts going back to the requirements of Government Performance and Results Acts (GPRA) since the mid-90s. However, the FY05 budget was the first year that the USACE restructured the budget process to focus on the individual business program, including Water Supply, as the initial building blocks for development of the budget. There is, therefore, only a four-year funding history for water supply.

Table 1: Water Supply Funding and Performance History

<i>Fiscal Year</i>	<i>1996</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Operation and Maintenance (Rounded in \$ Millions)			\$1	\$1	\$3	\$4	\$6
Billings, Collections, & Studies			\$1	\$1	\$3	\$2.95	\$3.085
ESA BiOps Program			\$ -	\$ -	\$ -	\$0.55	\$2.114
Joint Costs			\$ -	\$ -	\$ -	\$ -	\$0.561
Portfolio			\$ -	\$ -	\$ -	\$0.30	\$0.300
Investigations (\$ Millions)			\$1	\$1	\$ -	\$ -	0
Appropriation (\$ Millions)			\$2	\$2	\$3	\$4	\$6.060
Acre-Feet under Contract versus Acre-Feet Available							
Acre Feet Available (Millions)	9.52	9.86	9.76	Note	Note	Note	11.1
Acre Feet Under Contract (Millions)	8.76	9.11	9.36	Note	Note	Note	10.5
Percent of Available Storage under Contract	92.00%	92.40%	95.90%	95.90%	96.00%	96.10%	95.00%
Costs to be Recovered versus Costs Recovered							
Costs to be recovered (\$ Millions)	\$1,333.50	\$1,477.20	\$1,459.80	Note	Note	Note	\$1,420
Costs recovered (\$ Millions)	\$700.30	\$1,064.00	\$1,096.10	Note	Note	Note	\$901
Percent Recovered	52.50%	72.00%	75.10%	75.20%	75.40%	75.60%	65.9%
<p><i>Note: Performance measures are targets for 2006-2009. The performance of the water supply business program has been obtained on a case-by-case basis over the years in response to specific data requests. Prior to being assessed by the Program Assessment Rating Tool, data was not collected on a regular basis. Thus, only limited performance data is available for 1996, 2004 and 2005. Beginning in 2006 an action to develop a water supply module for the Operation and Maintenance Business Information Link was undertaken. This module will permit the required data to be collected on an annual basis through an automated system. The module is scheduled for completion in September 2009.</i></p>							

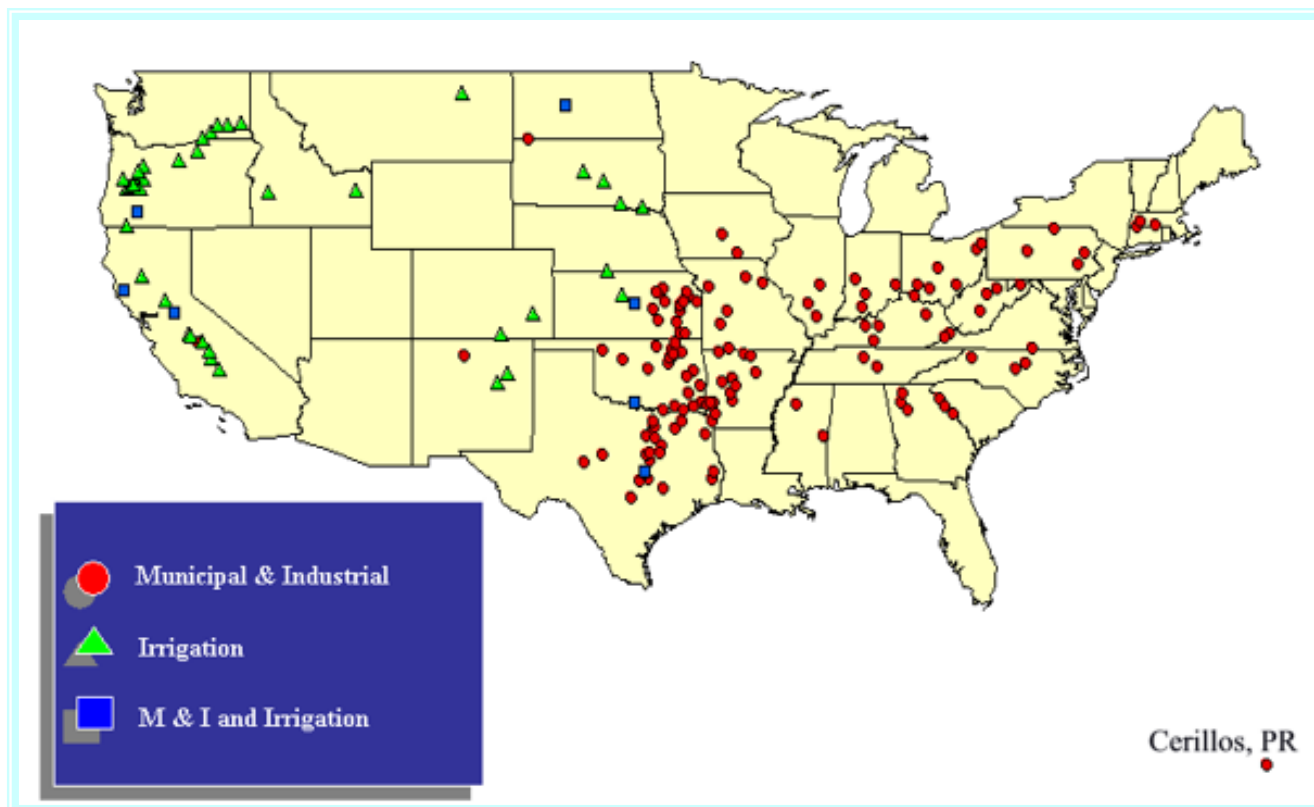


Figure 1: Water Storage for Municipal and Industrial (M&I) Water Supply

This picture displays the location of the 132 reservoir projects that contain storage space for municipal and industrial water supply and the 48 projects that contain irrigation storage. Irrigation our of Corps reservoir projects in the western United States is administered by the Bureau of Reclamation.

Project Spotlight: A “Typical Project”

Out of the USACEs’ 136 reservoir projects, which include Municipal & Industrial (M&I) Water Supply, there is not a “typical” project, but rather “examples” of projects. Such examples include projects where water supply was originally authorized and where storage has been reallocated from a previously authorized purpose to water supply. There are projects where we have one water supply agreement for the total storage space and there is one project where we have signed 34 agreements. We have signed M&I water supply agreements with states, Federal/Interstate commissions, river basin commissions, counties, cities, industries, private interests and individuals. Our agreements range in size from over 1.4 million acre-feet down to 1 acre-foot.

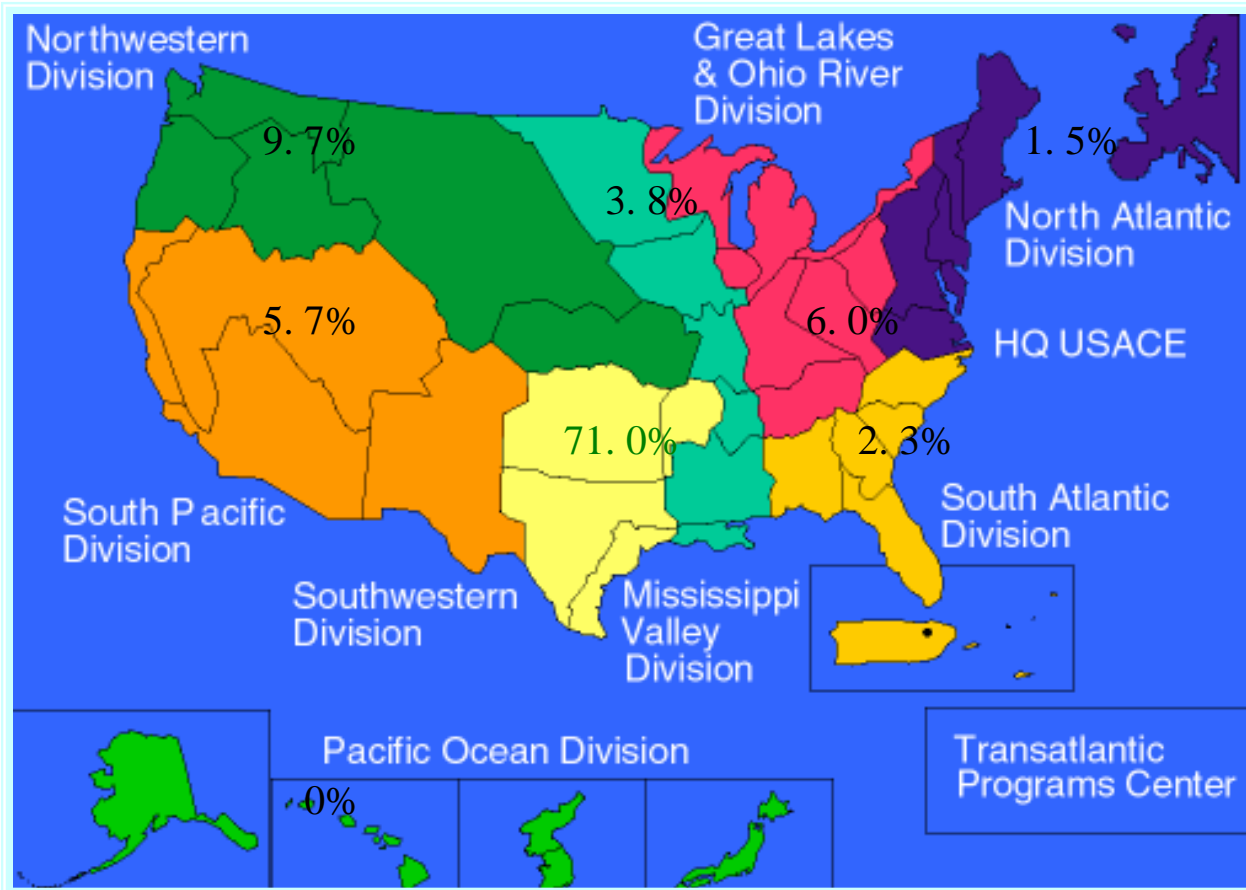


Figure 2: M&I Storage Space, Major Subordinate Command (MSC) Distribution by Percent

This picture shows by percent the distribution of the storage space in Corps reservoir projects set aside for municipal and industrial water supply. As shown, the vast majority, about 76 percent is located in our southwestern division covering the states of Texas, Oklahoma and parts of Kansas, Missouri and Arkansas.

Base Funding and Performance

The Base Plan program for O&M includes funding sufficient to meet minimum legal responsibilities for the operation and maintenance of the project facilities needed specifically for water supply as well as the development and renegotiation of water supply agreements and the billing and collection of payments and repayments. The FY09 program for O&M also includes the costs of two ongoing studies (the Alabama-Coosa-Tallapoosa / Apalachicola-Chattahoochee-Flint study and the Texas Water Allocation Assessment). The program also includes the joint costs allocated to water supply in the O&M budget as well as the funds required for the water

supply portion of the ESA BiOps program and the funding for the National Water Supply Portfolio Assessment.

Water supply performance targets, percent of acre-feet under contract versus acre-feet available and percent of costs recovered versus costs to be recovered are impacted primarily by the negotiation, collections and billings portion of the O&M budget. This value is the same for the budget and enacted plans. While studies, surveys and investigations for water have the potential to increase the absolute number of acre-feet available for contracting and the potential revenues to be returned to the Treasury, this action can only take place through the normal planning process. This process consists of two steps: (1) a preliminary assessment funded through the O&M budget at Federal expense and (2) a feasibility study funded through the Investigation budget with costs shared 50/50 between the Federal Government and the local sponsor. If favorable, this investigation results in a water supply agreement between the parties with the local sponsor responsible for the assigned cost of storage and the annual OMRR&R expenses. The Federal billing and collection of these expenses are assigned to the O&M budget.

The performance targets for the two water supply performance measures are shown in Table 2 below.

Table 2: Water Supply Base Funding by Account
(\$ Millions)

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Investigations	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	\$ -	\$ -	\$ -	\$ -	\$ -
Mississippi River and Tributaries (MRT) Project	\$ -	\$ -	\$ -	\$ -	\$ -
Operation and Maintenance (O&M)	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4
MRT O&M	\$ -	\$ -	\$ -	\$ -	\$ -
Total (Round in \$ Millions)	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4

Initiatives for Base Plan

The Portfolio Assessment for Water Supply was a new initiative included under Remaining Items in the FY08 Budget. This initiative is developing a set of criteria to guide project or basin specific water reallocation studies. A portfolio of these studies will be developed with a view of showing the best studies on a national basis to justify further review. The assessment program will also enable the USACE to determine the feasibility of alternate funding arrangements that rely on program beneficiaries to provide the funding for any follow-up studies.

Table 3: Water Supply Base Funding and Performance

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Appropriation (Rounded in \$ Millions)	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4
Acre-Feet under Contract versus Acre-Feet Available (% of Available Storage under Contract)	96.2%	96.3%	96.4%	96.5%	96.6%
Costs to be Recovered versus Costs Recovered (% Recovered)	67%	69%	72%	74%	75%

Enhanced Funding and Performance

As municipal and industrial water supply is primarily a state and local responsibility, it is not a major mission of USACE, as a result, there is no enhanced funding for this business program. However, if the program were to receive additional funding, well-justified O&M studies and investigations for water supply could be undertaken. In out years it is anticipated additional studies could be initiated as follow-on to the nationwide portfolio assessment. Records indicate that water supply is a well justified business program with at least \$5 returned to the U.S. Treasury for every \$1dollar expended. For water supply there is no Enhanced Funding and Performance Table

**Table 4: Enhanced Funding and Performance
(\$ Millions)**

<i>Fiscal Year</i>	2010	2011	2012	2013	2014
Investigations	\$	\$	\$	\$	\$
Construction	\$ -	\$ -	\$ -	\$ -	\$ -
Mississippi River and Tributaries (MRT) Project	\$ -	\$ -	\$ -	\$ -	\$ -
Operation and Maintenance (O&M)	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4
MRT O&M	\$ -	\$ -	\$ -	\$ -	\$ -
Total (Round in \$ Millions)	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4

Initiatives for Enhanced Plan

If “wedge” money for new starts was received for this business program, additional projects could be considered. While specific funding decisions would be made at that time, several examples of projects that could be considered are:

- Funding of the Middle Brazos, TX Water Supply Initiative
- Big Sandy River Watershed Re-evaluation, OH
- Willamette River Basin Review, OR
- Green River Water Supply Reallocation study, KY
- Rough River Water Supply Reallocation study, KY

For water supply the performance measures are based on storage space placed under contract and revenues collected. The water supply budget, regardless of the funding level always includes the minimum required to bill and collect revenues. While the absolute numbers of storage placed under contract and revenues to be collected may increase, the percent is what is measured. Future initiatives will impact targets much later on and the base/enhanced have the same existing projects.

Potential Work with “Wedge Money”

The Water Supply Program is not included in the assumptions for potential wedge funding in this Five Year Development Plan.

Executive Direction and Management



Executive Direction and Management



Key Statistics

- ❖ Provides for executive direction and management (ED&M) of the Civil Works Program, under the Director of Civil Works.
- ❖ ED&M is accomplished through 5 functions: command and control, policy and guidance, program development, national coordination, and quality assurance
- ❖ Authorized strength under USACE 2012 is 76 uniformed Army personnel and 997 civilian full-time equivalents (FTEs).

Accomplishments

- **Command and Control,** Leading development, defense, and execution of \$5.4 billion Civil Works Program for FY09;
- **Policy and Guidance**
 - Produced documents detailing Civil Works' management activities, FY10 Program Development Engineering Circular (EC), FY09 Program Execution EC, and Engineering Manuals (EMs)
- **Program Management**
 - Developed FY10 President's Program of \$5.6 billion, as well as additional FY09 emergency request of \$800 million.
 - Managed the FY09 Civil Works Program through a monthly Project Review Board (PRB), quarterly Directorate Management Reviews (DMRs), and Command Management Reviews (CMRs)
 - Lean Six Sigma: Business transformation and process reevaluation
- **National Coordination.**
 - 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
- **Quality Assurance:** Asset Management (AM) Program prepared and submitted USACE AM Quality Management Plan scope of work (SOW).

Future Challenges

- Evaluate and establish future performance measures that demonstrate program values to the nation through planned efficiency, outputs and outcome performances, rather than the current justification based on asserted resource needs
- Increase Staff and Strengthen Expertise. Headquarters staffing is constrained. Staff ability to review decision documents in a timely manner has decreased severely; there are not enough resources to evaluate and review them efficiently. Decision document delays have led to project delays, resulting in an increasing number of unsatisfied project sponsors. Additionally, USACE is taking enormous risk in not maintaining design and construction standards and criteria (S/C) documents. The average (S/C) document is 12 years old, meaning that we are not using the most modern methods.
- Improve Quality Assurance (QA) Assessments. Division offices perform one QA assessment per quarter and they have become more “virtual” and less “boots on the ground”, as operational funds have diminished
- Strengthen Community of Practice (COP). The purpose is to develop a capable workforce for today and for the future. The workforce will be comprised of well motivated, functional Program Development Teams. The goal is to share workloads regionally ensuring expertise at all levels. Insufficient ED&M funding has caused a lack of division manpower and funding for travel, making it impossible to efficiently and adequately develop and staff necessary CoPs.

History of Funding and Performance

The overall Strategic Plan is considered in all functions. The Program Account funds activities essential to supporting the Civil Works Program mission, including several USACE Strategic Plan Goals:

Strategic Goal 1: This is supported through DoD strategies and guidance for security cooperation by assisting in the development of civil/military emergency management competence, disaster preparedness, and consequence management.

Strategic Goal 2: This is supported through implementing the President’s Management Agenda for managing and operating assets. External contract support will assist in the execution of a national risk management framework, program management support, data integration support and other logistical services.

Strategic Goal 5: USACE will ensure its ability to accomplish civil works missions, and to provide expert scientific and engineering technical assistance to the Army, Department of Defense, other Federal agencies, and internationally. A solid technical foundation in core competencies while promoting organizational effectiveness, and fiduciary integrity will be maintained. The Program Account improved technical guidance, criteria documents, design, and construction standards. Additionally, the E-Government initiative supports Budget Formulation and Execution; USACEs’ share of the Federal Line of Business Initiatives and Recreation-One Stop.

Funding for the Expenses Program has not kept pace with inflation rates or program growth. Since 1995, Civil Works business programs grew, but the Expenses budget authority has remained flat in nominal terms. Over this time frame, USACE has reduced the number of Divisions from 11 to 8. FY08 funding supported approximately 60 military personnel and 876 Full Time Equivalents (FTE).

Table 1: ED&M Funding and Performance History

<i>Fiscal Year</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Appropriation (\$ Millions)	\$154	\$159	\$166	\$154	\$167	\$171	179

Base Funding and Performance

The Five-Year base program provides funding levels which will continue to force the Executive Direction and Management (ED&M) program to undertake its activities with constrained resources, even though the budget has increased in nominal terms in recent years. At this funding level, the ED&M staffing could decline from 850 full-time FTEs in FY09 to approximately 799 FTE over five years. This increases individual workload particularly to our program and project management, national and regional coordination, and quality assurance functions.

Work plans in FY10 and out-years will be developed in accordance with the following priorities:

- Improving of program justification statements and program documentation
- Improving budgeting and financial performance
- 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

Table 2: ED&M Five-Year Base Funding Plan

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Appropriation (\$ Millions)	\$ 184	\$ 187	\$ 187	\$ 190	\$ 197

Base Plan Initiatives

- review positions to determine need and priority,
- consider need for new labor capability, and to
- determine which existing labor capability can be “traded out” for needed additional and/or new labor capability

Enhanced Funding and Performance

The added funding would be used to improve the performance of management functions and to increase the level of effort on management initiatives. The enhanced level of funding provides investment opportunities that will allow USACE to better align with the USACE 2012 concept, which creates more integrated teams. We propose to bring aboard 55 positions spread across most ED&M organizations. On average, each position costs \$144,000. The five-year enhanced funding for this program would enable the program to improve the performance of management functions and to increase the level of effort on management initiatives.

Table 3: ED&M Five-Year Enhanced Funding Plan

<i>Fiscal Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Appropriation (\$ Millions)	\$ 190	\$ 195	\$ 201	\$ 207	\$ 214

Enhanced Plan Initiatives

- Filling several key positions with responsibilities extending across most of the ED&M organizations.
- Reducing the backlog and processing time for water project review of Project Cooperation Agreements
- 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.
- Managing business process transformation.






Potential Work with “Wedge Money”

This program is not included in the assumptions for potential wedge funding in this Five Year Development Plan.

Appendix

Appendix A: FY10 Relative Risk Ranking Matrix

Relative Risk Ranking Matrix						
Condition		Condition Classification				
		F	D	C	B	A
Consequence		(Failed)	(Inadequate)	(Probably Inadequate)	(Probably Adequate)	(Adequate)
Consequence Category	I	1	2	4	7	18
	II	3	5	8	11	20
	III	6	9	12	14	22
	IV	10	13	15	16	24
	V	17	19	21	23	25

-  High Consequence, Low Reliability (Failed)
-  Med-High Consequence, Low-Med Reliability (Inadequate)
-  Medium Consequence, Medium Reliability (Probably Inadequate)
-  Low Consequence, Med-High Reliability (Probably Adequate)
-  Minimal Consequences, High Reliability (Adequate)

Performance Reliability Assessment Standards	
Condition Classification	Definitions
A Adequate	<p>There is a high level of confidence that the feature will perform well under the designed operating conditions. This confidence level is supported by data, studies or observed project characteristics which are judged to meet current engineering or industry standards.</p> <p>There is a limited probability that the verified degraded conditions will cause an inefficient operation, or degradation or loss of service.</p>
B Probably Adequate	<p>There is a low level of confidence that the feature will perform well under designed operating conditions, and may not specifically meet engineering or industry standards. The feature may require additional investigation or studies to confirm adequacy.</p> <p>There is a low probability that the verified degraded conditions will result in inefficient operation, or degradation or loss of service.</p>
C Probably Inadequate	<p>There is a low level of confidence that the feature will not perform well under designed operating conditions, and may not specifically meet engineering or industry standards. The feature may require additional investigation or studies to confirm adequacy. The feature does not meet current engineering or industry standards.</p> <p>There is a moderate probability that the verified degraded conditions will result in inefficient operation, or degradation or loss of service</p>
D Inadequate	<p>There is a high level of confidence that the feature will not perform well under designed operating conditions. Physical signs of distress and deterioration are present. Analysis indicates that factors of safety are near limit state. The feature deficiencies are serious enough that the feature no longer performs at a satisfactory level of performance or service.</p> <p>There is a high probability that the verified degraded conditions will result in inefficient operation, or degradation or loss of service.</p>
F Failed	<p>The feature has FAILED</p> <p>Historically the feature regularly experiences scheduled or unscheduled closures or loss of service for repairs.</p>

Category	CONSEQUENCES
I	PAR → >100,000, TPAR → >1,000 National to Multi-Region/Basin disruption of essential facilities and access. Economic Impact-Massive Losses (>\$1B). Impact-National Massive environmental mitigation cost.
II	PAR → 50,000 to 100,000, TPAR → 500 to 1,000 Multi-Regional/Basin disruption of essential facilities and access. Economic Impact-Multi-regional losses. (\$500M to \$1B) major public and private facilities. Very large environmental mitigation cost.
III	PAR → 25,000 to 50,000, TPAR → 250 to 500 Regional disruption of essential facilities and services Economic Impact-Regional losses, (\$250M to \$500M). Large environmental mitigation cost.
IV	PAR → 10,000 to 25,000, TPAR → 125 to 250 Local to Regional disruption of essential facilities and access. Economic Impact-local to regional (>\$125M to \$250M). Medium Environmental mitigation cost.
V	PAR → <10,000, TPAR → <125 Local disruption of essential facilities and access. Economic Impact-local to regional (<\$125M). Minimal to no Environmental mitigation cost.

Appendix Tables

The tables in this section are as follows:

- ❖ I-1 Five-year funding schedules under the Base Plan Scenario for the studies, preconstruction engineering and designs (PEDs), and Remaining Items funded from the Investigations account in the FY10 budget. No new studies or new PED phases are displayed after FY10. All work on the Louisiana Coastal Area Program is assumed to migrate to the Construction account starting in FY10. The amounts displayed after FY11 for the studies and PEDs represent “capability” level funding, that is, the maximum that USACE could efficiently use for the studies and PEDs. Remaining Items are allocated among business programs. Remaining funding is displayed in a consolidated line item for “Additional Study and PED Activities (including Remaining Items)” that initiates in FY11, when such funding would first become available. This line item represents the additional funding available in each fiscal year after FY10 for new studies, new PED phases, and increased effort on Remaining Items.
- ❖ I-2 Five-year funding schedules under the Enhanced Plan Scenario for the studies, PEDs, and Remaining Items funded from the Investigations account in the FY10 budget. The schedules differ from those in the Base Plan in that the individual studies and PEDs are funded at the capability level in FY10 as well as the out-years, and the line item for “Additional Study and PED Activities (including Remaining Items)” begins in FY10 and is higher in the out-years due to the overall funding level.
- ❖ C-1 Five-year funding schedules under the Base Plan Scenario for the projects, Continuing Authority Programs (CAPs), and Remaining Items funded from the Construction account in the FY10 budget. FY10 budget policy, including the construction funding guidelines, is assumed for all fiscal years. No new projects or resumptions are displayed. The amounts displayed after FY10 represent capability level funding for most projects, but funding levels for those projects with the greatest year-over-year increases in capabilities are constrained so that the total funding fits within the amount assumed to be available under this scenario. In addition, for those projects that have benefit-cost ratios of below 3.0 to 1 and do not significantly reduce inundation risks to life, only the ongoing continuing contracts are funded, in accordance with FY10 budget policy. The CAPs and the Remaining Items are allocated among business program. Remaining funding is displayed in a consolidated line item for “Additional Projects and Programs (including CAPs and Remaining Items).” This line item represents the additional funding available in each fiscal year after FY10 for the initiation, continuation, or resumption of additional projects and programs, for the Louisiana Coastal Area program, and for increased effort on CAPs and Remaining Items.
- ❖ C-2 Five-year funding schedules under the Enhanced Plan Scenario for the projects, CAPs, and Remaining Items funded from the Construction account in the FY10 budget. The schedules differ from those in the Base Plan in that the funding for those projects with the greatest year-over-year increases in capabilities is not constrained after FY11. Also, the line item for “Additional Projects and Programs (including CAPs and Remaining Items)” is higher after FY11 due to the higher overall funding level.

- ❖ C-3 A list of all active or un-started CAP projects

- ❖ M-1 Five-year funding schedules under the Base Plan Scenario for the investigations and construction projects funded from the Mississippi River and Tributaries (MR&T) account in the FY10 budget. This table follows the procedures outlined above for Tables I-1 and C-1. However, there is no line item for additional construction projects because the projects in the FY10 budget could use all of the construction funds available for the account.

- ❖ M-2 Five-year funding schedules under the Enhanced Plan Scenario for the investigations and construction projects funded from the MR&T account in the FY10 budget. This table follows the procedures outlined above for Tables I-2 and C-2. However, there is no line item for additional construction projects because the projects in the FY10 budget could use all of the construction funds available for the account.

**Table I-1: Investigation Account, Base Plan Scenario
(\$ Thousands)**

DIV	ST	Project Name	2010	2011	2012	2013	2014
POD	AK	MATANUSKA RIVER WATERSHED, AK	100	100	0	0	0
POD	AK	YAKUTAT HARBOR, AK	450	450	450	0	0
SPD	AZ	PIMA COUNTY, AZ	275	0	0	0	0
SPD	AZ	VA SHLY-AY AKIMEL SALT RIVER RESTORATION, AZ	658	500	500	0	0
SPD	CA	CALIFORNIA COASTAL SEDIMENT MASTER PLAN, CA	900	900	900	0	0
SPD	CA	COYOTE & BERRYESSA CREEKS, CA	950	923	0	0	0
SPD	CA	HAMILTON CITY, CA	400	521	0	0	0
SPD	CA	SAC-SAN JOAQUIN DELTA ISLANDS AND LEVEES, CA	468	0	0	0	0
SPD	CA	SOLANA BEACH, CA	278	278	0	0	0
SPD	CA	SUTTER COUNTY, CA	339	109	109	109	109
SPD	CA	UPPER PENITENCIA CREEK, CA	386	0	0	0	0
SAD	FL	INDIAN RIVER LAGOON NORTH, FL	150	0	0	0	0
SAD	FL	PORT EVERGLADES HARBOR, FL	510	0	0	0	0
SAD	GA	AUGUSTA, GA	278	278	278	0	0
SAD	GA	OCMULGEE RIVER BASIN WATERSHED MANAGEMENT, GA	100	0	0	0	0
SAD	GA	SAVANNAH HARBOR EXPANSION, GA	1,000	0	0	0	0
SAD	GA	TYBEE ISLAND, GA	206	625	0	0	0
POD	GM	HAGATNA RIVER FLOOD CONTROL, GUAM	200	46	0	0	0
POD	HI	ALA WAI CANAL, OAHU, HI	175	175	0	0	0
LRD	IL	DES PLAINES RIVER, IL (PHASE II)	500	500	0	0	0
MVD	IL	ILLINOIS RIVER BASIN RESTORATION , IL	400	400	400	400	0
LRD	IL	INTERBASIN CONTROL OF GREAT LAKES-MISSISSIPPI RIVER AQUATIC NUISANCE SPECIES, IL, IN, OH & WI	300	300	300	300	300
LRD	IN	INDIANA HARBOR, IN	300	300	300	1,257	1,257
NWD	KS	TOPEKA, KS	100	100	5,000	5,000	5,000
LRD	KY	GREEN RIVER WATERSHED, KY	200	1,700	0	0	0
MVD	LA	BAYOU SORREL LOCK, LA	1,239	1,239	1,560	600	0
MVD	LA	CALCASIEU LOCK, LA	1,000	1,000	117	0	0
MVD	LA	LOUISIANA COASTAL AREA ECOSYSTEM RESTORATION, LA	19,408	0	0	0	0
MVD	LA	LOUISIANA COASTAL AREA ECOSYSTEM RESTORATION, LA (SCIENCE PROGRAM)	5,592	0	0	0	3,224
MVD	LA	LOUISIANA COASTAL PROTECTION AND RESTORATION, LA	3,000	1,000	1,000	0	0
NAD	MA	BOSTON HARBOR DEEP DRAFT INVESTIGATION, MA	500	500	2,100	2,100	2,100
NAD	MA	MERRIMACK RIVER WATERSHED STUDY, NH & MA	200	200	200	200	200
NAD	MA	PILGRIM LAKE, TRURO & PROVINCETOWN, MA	100	0	0	0	0
NAD	MD	EASTERN SHORE, MID CHESAPEAKE BAY ISLAND, MD	250	250	0	0	0
LRD	MI	GREAT LAKES NAV SYST STUDY, MI, IL, IN, MN, NY, OH, PA & WI	400	400	400	250	0
MVD	MN	MINNESOTA RIVER WATERSHED STUDY, MN & SD (MN RIVER AUTH)	350	350	350	350	0
MVD	MN	RED RIVER OF THE NORTH BASIN, ND, MN, SD & MANITOBA, CANADA	150	150	150	0	0
MVD	MN	WILD RICE RIVER, RED RIVER OF THE NORTH BASIN, MN	271	271	271	0	0
NWD	MO	KANSAS CITYS, MO & KS	224	0	0	0	0
NWD	MO	MISSOURI RIVER DEGRADATION, MO	600	1,000	595	0	0
MVD	MO	ST LOUIS, MO (WATERSHED)	400	300	0	0	0
NWD	MT	YELLOWSTONE RIVER CORRIDOR, MT	200	200	1,000	1,000	1,000

**Table I-1: Investigation Account, Base Plan Scenario Continued
(\$ Thousands)**

SAD	NC	CURRITUCK SOUND, NC	150	115	0	0	0
SAD	NC	JOHN H KERR DAM AND RESERVOIR, VA & NC (SECTION 216)	300	300	68	0	0
SAD	NC	NEUSE RIVER BASIN, NC	200	200	200	1,000	1,000
NAD	NJ	DELAWARE RIVER COMPREHENSIVE, NJ	290	290	290	0	0
NAD	NJ	HUDSON - RARITAN ESTUARY, HACKENSACK MEADOWLANDS, NJ	200	0	0	0	0
NAD	NJ	HUDSON - RARITAN ESTUARY, LOWER PASSAIC RIVER, NJ	200	200	200	0	0
NAD	NJ	SHREWSBURY RIVER & TRIBUTARIES, NJ	511	307	0	0	0
LRD	NY	BUFFALO RIVER ENVIRONMENTAL DREDGING, NY	100	100	0	0	0
NAD	NY	HUDSON - RARITAN ESTUARY, NY & NJ	200	200	200	200	200
NAD	NY	JAMAICA BAY, MARINE PARK AND PLUMB BEACH, NY	200	837	837	0	0
NWD	OR	LOWER COLUMBIA RIVER ECOSYSTEM RESTORATION, OR & WA	300	300	300	1,000	1,000
NWD	OR	WALLA WALLA RIVER WATERSHED, OR & WA	203	203	203	0	0
NWD	OR	WILLAMETTE RIVER FLOODPLAIN RESTORATION, OR	240	240	240	240	240
SAD	SC	EDISTO ISLAND, SC	167	0	0	0	0
LRD	TN	MILL CREEK WATERSHED, DAVIDSON COUNTY, TN	50	0	0	0	0
SWD	TX	BRAZOS ISLAND HARBOR, BROWNSVILLE CHANNEL, TX	526	0	0	0	0
SWD	TX	FREEPORT HARBOR, TX	675	0	0	0	0
SWD	TX	GIWW, HIGH ISLAND TO BRAZOS RIVER REALIGNMENTS, TX	200	200	0	0	0
SWD	TX	GUADALUPE AND SAN ANTONIO RIVER BASINS, TX	423	423	423	423	500
SWD	TX	LOWER COLORADO RIVER BASIN, TX	425	425	425	425	425
SWD	TX	NUECES RIVER AND TRIBUTARIES, TX	250	250	250	250	250
SWD	TX	RIO GRANDE BASIN, TX	304	0	0	0	0
SWD	TX	SABINE PASS TO GALVESTON BAY, TX	200	1,900	1,900	1,900	1,900
NAD	VA	LYNNHAVEN RIVER BASIN, VA	112	0	0	0	0
NWD	WA	PUGET SOUND NEARSHORE MARINE HABITAT RESTORATION, WA	400	400	0	0	0
NWD	WA	PUYALLUP RIVER, WA	250	100	0	0	0
		Total - Investigations (Listed under States)	50,583	22,055	21,516	17,004	18,705
		Remaining Items	49,417	49,911	49,911	50,900	52,876
		Additional Studies and PEDS (including Remaining Items)	0	29,034	29,573	35,096	35,419
		Total - Investigations Appropriations	100,000	101,000	101,000	103,000	107,000

**Table I-2: Investigation Account, Enhanced Plan Scenario
(\$ Thousands)**

MSC	ST	Project Name	2010	2011	2012	2013	2014
POD	AK	MATANUSKA RIVER WATERSHED, AK	100	500	0	0	0
POD	AK	YAKUTAT HARBOR, AK	450	1,000	1,000	0	0
SPD	AZ	PIMA COUNTY, AZ	275	0	0	0	0
SPD	AZ	VA SHLY-AY AKIMEL SALT RIVER RESTORATION, AZ	658	0	0	0	0
SPD	CA	CALIFORNIA COASTAL SEDIMENT MASTER PLAN, CA	900	1,500	1,560	600	0
SPD	CA	COYOTE & BERRYESSA CREEKS, CA	950	1,200	573	0	0
SPD	CA	HAMILTON CITY, CA	400	0	0	0	0
SPD	CA	SAC-SAN JOAQUIN DELTA ISLANDS AND LEVEES, CA	468	0	0	0	0
SPD	CA	SOLANA BEACH, CA	278	426	0	0	0
SPD	CA	SUTTER COUNTY, CA	339	0	0	0	0
SPD	CA	UPPER PENITENCIA CREEK, CA	386	0	0	0	0
SAD	FL	INDIAN RIVER LAGOON NORTH, FL	150	0	0	0	0
SAD	FL	PORT EVERGLADES HARBOR, FL	510	250	0	0	0
SAD	GA	AUGUSTA, GA	278	837	325	0	0
SAD	GA	OCMULGEE RIVER BASIN WATERSHED MANAGEMENT, GA	100	0	0	0	0
SAD	GA	SAVANNAH HARBOR EXPANSION, GA	1,000	0	0	0	0
SAD	GA	TYBEE ISLAND, GA	206	13	0	0	0
POD	GM	HAGATNA RIVER FLOOD CONTROL, GUAM	200	46	0	0	0
POD	HI	ALA WAI CANAL, OAHU, HI	175	175	0	0	0
LRD	IL	DES PLAINES RIVER, IL (PHASE II)	500	500	0	0	0
MVD	IL	ILLINOIS RIVER BASIN RESTORATION , IL	400	1,500	2,100	1,262	0
LRD	IL	INTERBASIN CONTROL OF GREAT LAKES-MISSISSIPPI RIVER AQUATIC NUISANCE SPECIES, IL, IN, OH & WI	300	1,000	1,000	1,000	1,000
LRD	IN	INDIANA HARBOR, IN	300	1,000	2,000	0	0
NWD	KS	TOPEKA, KS	100	534	0	0	0
LRD	KY	GREEN RIVER WATERSHED, KY	200	0	0	0	0
MVD	LA	BAYOU SORREL LOCK, LA	1,239	3,300	0	0	0
MVD	LA	CALCASIEU LOCK, LA	1,000	1,000	595	0	0
MVD	LA	LOUISIANA COASTAL AREA ECOSYSTEM RESTORATION, LA	19,408	1,890	1,111	0	0
MVD	LA	LOUISIANA COASTAL AREA ECOSYSTEM RESTORATION, LA (SCIENCE PROGRAM)	5,592	5,000	5,000	5,000	5,000
MVD	LA	LOUISIANA COASTAL PROTECTION AND RESTORATION, LA	3,000	1,000	1,000	1,000	1,000
NAD	MA	BOSTON HARBOR DEEP DRAFT INVESTIGATION, MA	500	1,700	0	0	0
NAD	MA	MERRIMACK RIVER WATERSHED STUDY, NH & MA	200	400	400	400	306
NAD	MA	PILGRIM LAKE, TRURO & PROVINCETOWN, MA	100	0	0	0	0
NAD	MD	EASTERN SHORE, MID CHESAPEAKE BAY ISLAND, MD	250	250	0	0	0
LRD	MI	GREAT LAKES NAV SYST STUDY, MI, IL, IN, MN, NY, OH, PA & WI	400	400	400	250	0
MVD	MN	MINNESOTA RIVER WATERSHED STUDY, MN & SD (MN RIVER AUTH)	350	1,400	1,400	1,257	0
MVD	MN	RED RIVER OF THE NORTH BASIN, ND, MN, SD & MANITOBA, CANADA	150	700	510	0	0
MVD	MN	WILD RICE RIVER, RED RIVER OF THE NORTH BASIN, MN	271	400	306	0	0
NWD	MO	KANSAS CITYS, MO & KS	224	0	0	0	0
NWD	MO	MISSOURI RIVER DEGRADATION, MO	600	300	0	0	0
MVD	MO	ST LOUIS, MO (WATERSHED)	400	300	0	0	0
NWD	MT	YELLOWSTONE RIVER CORRIDOR, MT	200	711	0	0	0

**Table I-2: Investigation Account, Enhanced Plan Scenario Continued
(\$ Thousands)**

SAD	NC	CURRITUCK SOUND, NC	150	102	0	0	0
SAD	NC	JOHN H KERR DAM AND RESERVOIR, VA & NC (SECTION 216)	300	300	68	0	0
SAD	NC	NEUSE RIVER BASIN, NC	200	625	400	0	0
NAD	NJ	DELAWARE RIVER COMPREHENSIVE, NJ	290	400	294	0	0
NAD	NJ	HUDSON - RARITAN ESTUARY, HACKENSACK MEADOWLANDS, NJ	200	0	0	0	0
NAD	NJ	HUDSON - RARITAN ESTUARY, LOWER PASSAIC RIVER, NJ	200	750	554	0	0
NAD	NJ	SHREWSBURY RIVER & TRIBUTARIES, NJ	511	307	0	0	0
LRD	NY	BUFFALO RIVER ENVIRONMENTAL DREDGING, NY	100	115	0	0	0
NAD	NY	HUDSON - RARITAN ESTUARY, NY & NJ	200	1,000	1,000	1,000	531
NAD	NY	JAMAICA BAY, MARINE PARK AND PLUMB BEACH, NY	200	0	0	0	0
NWD	OR	LOWER COLUMBIA RIVER ECOSYSTEM RESTORATION, OR & WA	300	750	586	0	0
NWD	OR	WALLA WALLA RIVER WATERSHED, OR & WA	203	729	1,450	0	0
NWD	OR	WILLAMETTE RIVER FLOODPLAIN RESTORATION, OR	240	500	500	500	700
SAD	SC	EDISTO ISLAND, SC	167	109	0	0	0
LRD	TN	MILL CREEK WATERSHED, DAVIDSON COUNTY, TN	50	0	0	0	0
SWD	TX	BRAZOS ISLAND HARBOR, BROWNSVILLE CHANNEL, TX	526	521	0	0	0
SWD	TX	FREEPORT HARBOR, TX	675	0	0	0	0
SWD	TX	GIWW, HIGH ISLAND TO BRAZOS RIVER REALIGNMENTS, TX	200	1,117	0	0	0
SWD	TX	GUADALUPE AND SAN ANTONIO RIVER BASINS, TX	423	765	700	772	7
SWD	TX	LOWER COLORADO RIVER BASIN, TX	425	850	775	500	500
SWD	TX	NUECES RIVER AND TRIBUTARIES, TX	250	1,000	1,000	1,000	591
SWD	TX	RIO GRANDE BASIN, TX	304	0	0	0	0
SWD	TX	SABINE PASS TO GALVESTON BAY, TX	200	0	0	0	0
NAD	VA	LYNNHAVEN RIVER BASIN, VA	112	0	0	0	0
NWD	WA	PUGET SOUND NEARSHORE MARINE HABITAT RESTORATION, WA	400	1,900	0	0	0
NWD	WA	PUYALLUP RIVER, WA	250	100	0	0	0
		Total - Investigations (Listed under States)	50,583	41,172	26,607	14,541	9,635
		Remaining Items	91,916	94,386	97,351	100,317	103,776
		Additional Studies and PEDS (including Remaining Items)	43,501	55,441	73,042	88,142	96,589
		Total - Investigations Appropriations	186,000	191,000	197,000	203,000	210,000

**Table C-1: Construction Account, Base Plan Scenario
(\$ Thousands)**

DIV	Project Name	ST	2010	2011	2012	2013	2014
POD	ST PAUL HARBOR, AK *	AK	3,000	0	0	0	0
SPD	AMERICAN RIVER WATERSHED (COMMON FEATURES), CA	CA	6,700	6,700	6,700	6,700	6,700
SPD	AMERICAN RIVER WATERSHED (FOLSOM DAM MODIFICATIONS), CA	CA	66,700	66,700	66,700	66,700	66,700
SPD	AMERICAN RIVER WATERSHED (FOLSOM DAM RAISE), CA	CA	600	600	600	600	600
SPD	HAMILTON AIRFIELD WETLANDS RESTORATION, CA	CA	14,250	14,250	14,250	14,250	14,250
SPD	KAWEAH RIVER, CA *	CA	640	0	0	0	0
SPD	LOS ANGELES HARBOR MAIN CHANNEL DEEPENING, CA *	CA	885	0	0	0	0
SPD	NAPA RIVER, CA	CA	5,000	5,000	5,000	5,000	5,000
SPD	NAPA RIVER, SALT MARSH RESTORATION, CA	CA	6,750	6,750	6,750	6,750	6,750
SPD	OAKLAND HARBOR (50 FOOT PROJECT), CA	CA	1,000	1,000	1,000	1,000	1,000
SPD	SACRAMENTO DEEPWATER SHIP CHANNEL, CA *	CA	10,000	6,510	0	0	0
SPD	SACRAMENTO RIVER BANK PROTECTION PROJECT, CA	CA	15,000	15,000	15,000	15,000	15,000
SPD	SANTA ANA RIVER MAINSTEM, CA	CA	52,193	52,193	52,193	52,193	52,193
SPD	SOUTH SACRAMENTO COUNTY STREAMS, CA	CA	2,500	2,500	2,500	2,500	2,500
SPD	SUCCESS DAM, TULE RIVER, CA (DAM SAFETY)	CA	10,000	10,000	10,000	10,000	10,000
SPD	WEST SACRAMENTO, CA *	CA	2,955	0	0	0	0
NAD	WASHINGTON, DC & VICINITY *	DC	6,790	0	0	0	0
SAD	CEDAR HAMMOCK, WARES CREEK, FL *	FL	5,565	0	0	0	0
SAD	CENTRAL & SOUTHERN FLORIDA, FL	FL	9,030	9,030	9,030	9,030	9,030
SAD	COMPREHENSIVE EVERGLADES RESTORATION PLAN, FL	FL	154,741	154,741	154,741	154,741	154,741
SAD	EVERGLADES & SOUTH FLORIDA ECOSYSTEM RESTORATION, FL	FL	1,725	1,725	1,725	1,725	1,725
SAD	HERBERT HOOVER DIKE, FL (SEEPAGE CONTROL)	FL	130,000	130,000	130,000	130,000	130,000
SAD	KISSIMMEE RIVER, FL *	FL	44,673	25,031	0	0	0
SAD	MARTIN COUNTY, FL	FL	350	350	350	350	350
SAD	MODIFIED WATER DELIVERIES TO ENP	FL	4,188	4,188	4,188	4,188	4,188
SAD	PINELLAS COUNTY, FL *	FL	6,000	6,000	6,000	6,000	550
SAD	RICHARD B RUSSELL DAM AND LAKE, GA & SC *	GA	1,615	1,485	0	0	0
MVD	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI	IA	150	150	150	150	150
MVD	ALTON TO GALE ORGANIZED LEVEE DISTRICTS, IL & MO	IL	300	300	300	300	300
MVD	CHAIN OF ROCKS CANAL, MISSISSIPPI RIVER, IL (DEF CORR) *	IL	6,500	6,500	5,635	0	0
LRD	CHICAGO SANITARY AND SHIP CANAL - DISPERSAL BARRIERS, IL *	IL	5,000	5,000	5,000	4,200	0
LRD	DES PLAINES RIVER, IL	IL	3,300	3,300	3,300	3,300	3,300
MVD	EAST ST LOUIS, IL	IL	2,000	2,000	2,000	2,000	2,000
LRD	MCCOOK AND THORNTON RESERVOIRS, IL	IL	25,000	25,000	25,000	25,000	25,000
MVD	MISS RIVER BTWN THE OHIO AND MO RIVERS (REG WORKS), MO & IL	IL	580	580	580	580	580
LRD	OLMSTED LOCKS AND DAM, OHIO RIVER, IL & KY	IL	109,790	109,790	109,790	109,790	109,790
MVD	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI	IL	11,350	11,350	11,350	11,350	11,350
MVD	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI *	IL	2,400	1,210	0	0	0
MVD	WOOD RIVER LEVEE, IL	IL	1,170	1,170	1,170	1,170	1,170
LRD	LITTLE CALUMET RIVER, IN *	IN	20,000	20,000	837	0	0
NWD	TURKEY CREEK BASIN, KS & MO	KS	2,500	2,500	2,500	2,500	2,500

**Table C-1: Construction Account, Base Plan Scenario Continued
(\$ Thousands)**

LRD	KENTUCKY LOCK AND DAM, TENNESSEE RIVER, KY	KY	1,000	1,000	1,000	1,000	1,000
LRD	MARKLAND LOCKS AND DAM, KY & IN (REHAB) *	KY	1,000	1,000	1,000	1,000	201
LRD	WOLF CREEK DAM, LAKE CUMBERLAND, KY *	KY	123,000	123,000	123,000	51,100	0
MVD	J BENNETT JOHNSTON WATERWAY, LA	LA	7,000	7,000	7,000	7,000	7,000
MVD	LAROSE TO GOLDEN MEADOW, LA (HURRICANE PROTECTION) *	LA	1,200	1,200	1,200	1,200	226
NAD	MUDDY RIVER, MA	MA	4,000	4,000	4,000	4,000	4,000
NWD	BLUE RIVER CHANNEL, KANSAS CITY, MO	MO	5,600	5,600	5,600	5,600	5,600
MVD	CHESTERFIELD, MO	MO	3,331	3,331	3,331	3,331	3,331
SWD	CLEARWATER LAKE, MO *	MO	40,000	40,000	40,000	36,451	0
NWD	KANSAS CITYS, MO & KS	MO	700	700	700	700	700
MVD	ST LOUIS FLOOD PROTECTION, MO	MO	566	566	566	566	566
MVD	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI *	MO	3,000	579	0	0	0
NWD	MISSOURI R FISH AND WILDLIFE RECOVERY, IA, KS, MO, MT, NE, ND & SD	N/A	70,000	70,000	70,000	70,000	70,000
SAD	CAROLINA BEACH AND VICINITY, NC	NC	1,500	1,500	1,500	1,500	1,500
SAD	WEST ONSLOW BEACH AND NEW RIVER INLET, NC	NC	400	400	400	400	400
SAD	WILMINGTON HARBOR, NC	NC	1,800	1,800	1,800	1,800	1,800
NWD	GARRISON DAM, LAKE SAKAKAWEA, ND	ND	8,620	8,620	8,620	8,620	8,620
NWD	ANTELOPE CREEK, NE *	NE	5,697	0	0	0	0
NAD	GREAT EGG HARBOR INLET AND PECK BEACH, NJ	NJ	6,500	6,500	6,500	6,500	6,500
NAD	RARITAN RIVER BASIN, GREEN BROOK SUB-BASIN, NJ	NJ	7,000	7,000	7,000	7,000	7,000
SPD	RIO GRANDE FLOODWAY, SAN ACACIA TO BOSQUE DEL APACHE, NM	NM	800	800	800	800	800
NAD	ATLANTIC COAST OF NYC, ROCKAWAY INLET TO NORTON POINT, NY	NY	3,000	3,000	3,000	3,000	3,000
NAD	FIRE ISLAND INLET TO MONTAUK POINT, NY	NY	5,800	5,800	5,800	5,800	5,800
NAD	LONG BEACH ISLAND, NY	NY	700	700	700	700	700
NAD	NEW YORK AND NEW JERSEY HARBOR, NY & NJ	NY	64,716	64,716	64,716	64,716	64,716
LRD	DOVER DAM, MUSKINGUM RIVER, OH (DAM SAFETY ASSURANCE)	OH	18,500	18,500	18,500	18,500	18,500
SWD	CANTON LAKE, OK *	OK	24,250	24,250	24,250	24,250	5,210
NWD	ELK CREEK LAKE, OR *	OR	500	0	0	0	0
NWD	LOWER COLUMBIA RIVER ECOSYSTEM RESTORATION, OR & WA	OR	1,650	1,650	1,650	1,650	1,650
NWD	WILLAMETTE RIVER TEMPERATURE CONTROL, OR *	OR	11,000	3,331	0	0	0
LRD	EMSWORTH LOCKS AND DAM, OHIO RIVER, PA *	PA	25,000	18,533	0	0	0
LRD	LOCKS AND DAMS 2, 3 AND 4, MONONGAHELA RIVER, PA	PA	6,210	6,210	6,210	6,210	6,210
LRD	PRESQUE ISLE PENINSULA, PA (PERMANENT)	PA	1,000	1,000	1,000	1,000	1,000
SAD	PORTUGUES AND BUCANA RIVERS, PR *	PR	45,000	45,000	23,750	0	0
SAD	RIO PUERTO NUEVO, PR	PR	5,000	5,000	5,000	5,000	5,000
LRD	CENTER HILL LAKE, TN *	TN	56,000	56,000	56,000	8,712	0
LRD	CHICKAMAUGA LOCK, TENNESSEE RIVER, TN	TN	1,000	1,000	1,000	1,000	1,000
SWD	BRAYS BAYOU, HOUSTON, TX	TX	7,300	7,300	7,300	7,300	7,300
SWD	SIMS BAYOU, HOUSTON, TX *	TX	25,700	4,580	0	0	0
SWD	TEXAS CITY CHANNEL (50-FOOT PROJECT), TX	TX	8,000	8,000	8,000	8,000	8,000
NAD	AIWW, BRIDGES AT DEEP CREEK, VA	VA	1,500	1,500	1,500	1,500	1,500
SAD	JOHN H KERR LAKE, VA & NC *	VA	16,915	0	0	0	0
NAD	NORFOLK HARBOR AND CHANNELS, CRANEY ISLAND, VA	VA	28,500	28,500	28,500	28,500	28,500
SAD	ROANOKE RIVER UPPER BASIN, HEADWATERS AREA, VA	VA	1,075	1,075	1,075	1,075	1,075
NWD	CHIEF JOSEPH DAM GAS ABATEMENT, WA	WA	1,000	1,000	1,000	1,000	1,000
NWD	COLUMBIA RIVER FISH MITIGATION, WA, OR & ID	WA	95,800	95,800	95,800	95,800	95,800

NWD	COLUMBIA RIVER TREATY FISHING ACCESS SITES, OR & WA	WA	500	500	500	500	500
NWD	DUWAMISH AND GREEN RIVER BASIN, WA	WA	2,600	2,600	2,600	2,600	2,600
NWD	HOWARD HANSON DAM, WA *	WA	13,000	0	0	0	0
NWD	LOWER SNAKE RIVER FISH & WILDLIFE COMPENSATION, WA, OR & ID	WA	1,500	1,500	1,500	1,500	1,500
NWD	MT ST HELENS SEDIMENT CONTROL, WA	WA	1,500	1,500	1,500	1,500	1,500
NWD	MUD MOUNTAIN DAM, WA	WA	400	400	400	400	400
MVD	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI *	WI	3,100	3,100	2,500	0	0
LRD	BLUESTONE LAKE, WV *	WV	86,700	69,577	0	0	0

Total - Construction (Listed under States)	1,610,020	1,474,821	1,302,107	1,145,848	1,019,122
Additional Projects and Programs (including CAP's and Remaining Items)	0	160,199	332,913	523,172	716,898
Continuing Authorities Programs	28,545	28,545	28,545	28,545	28,545
Remaining Items	79,435	79,435	79,435	79,435	79,435
Total - Construction Appropriations	1,718,000	1,743,000	1,743,000	1,777,000	1,844,000

* Denotes Projects Completing

**Table C-2: Construction Account, Enhanced Plan Scenario
(\$ Thousands)**

DIV	Project Name	ST	2010	2011	2012	2013	2014
POD	ST PAUL HARBOR, AK *	AK	3,000	0	0	0	0
SPD	AMERICAN RIVER WATERSHED (COMMON FEATURES), CA	CA	6,700	6,700	9,100	10,000	12,000
SPD	AMERICAN RIVER WATERSHED (FOLSOM DAM MODIFICATIONS), CA	CA	66,700	66,700	70,000	50,000	20,000
SPD	AMERICAN RIVER WATERSHED (FOLSOM DAM RAISE), CA	CA	600	600	5,080	24,000	30,000
SPD	HAMILTON AIRFIELD WETLANDS RESTORATION, CA	CA	14,250	14,250	15,000	13,000	13,000
SPD	KAWEAH RIVER, CA *	CA	640	0	0	0	0
SPD	LOS ANGELES HARBOR MAIN CHANNEL DEEPENING, CA *	CA	885	0	0	0	0
SPD	NAPA RIVER, CA	CA	5,000	5,000	5,000	20,000	20,000
SPD	NAPA RIVER, SALT MARSH RESTORATION, CA	CA	6,750	6,750	7,000	15,000	4,750
SPD	OAKLAND HARBOR (50 FOOT PROJECT), CA *	CA	1,000	1,000	2,200	2,200	1,944
SPD	SACRAMENTO DEEPWATER SHIP CHANNEL, CA *	CA	10,000	6,510	0	0	0
SPD	SACRAMENTO RIVER BANK PROTECTION PROJECT, CA	CA	15,000	25,000	30,000	35,000	30,000
SPD	SANTA ANA RIVER MAINSTEM, CA	CA	52,193	52,193	52,193	61,000	71,244
SPD	SOUTH SACRAMENTO COUNTY STREAMS, CA *	CA	5,668	5,668	4,332	0	0
SPD	SUCCESS DAM, TULE RIVER, CA (DAM SAFETY)	CA	10,000	100,000	100,000	100,000	100,000
SPD	WEST SACRAMENTO, CA *	CA	2,955	0	0	0	0
NAD	WASHINGTON, DC & VICINITY *	DC	6,790	0	0	0	0
SAD	CEDAR HAMMOCK, WARES CREEK, FL *	FL	5,565	0	0	0	0
SAD	CENTRAL & SOUTHERN FLORIDA, FL	FL	9,030	9,030	9,030	20,000	22,000
SAD	COMPREHENSIVE EVERGLADES RESTORATION PLAN, FL	FL	154,741	154,741	154,741	225,220	250,418
SAD	EVERGLADES & SOUTH FLORIDA ECOSYSTEM RESTORATION, FL	FL	1,725	1,725	1,725	1,725	1,725
SAD	HERBERT HOOVER DIKE, FL (SEEPAGE CONTROL)	FL	130,000	130,000	130,000	130,000	130,000
SAD	KISSIMMEE RIVER, FL *	FL	44,673	25,031	0	0	0
SAD	MARTIN COUNTY, FL *	FL	350	350	1,500	1,350	1,150
SAD	MODIFIED WATER DELIVERIES TO ENP	FL	4,188	5,000	7,000	7,000	7,000
SAD	PINELLAS COUNTY, FL *	FL	6,000	6,000	6,000	6,550	0
SAD	RICHARD B RUSSELL DAM AND LAKE, GA & SC *	GA	1,615	1,485	0	0	0
MVD	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI	IA	150	150	150	1,600	1,600
MVD	ALTON TO GALE ORGANIZED LEVEE DISTRICTS, IL & MO *	IL	300	1,661	3,000	3,000	1,540
MVD	CHAIN OF ROCKS CANAL, MISSISSIPPI RIVER, IL (DEF CORR) *	IL	6,500	6,500	5,635	0	0
LRD	CHICAGO SANITARY AND SHIP CANAL - DISPERSAL BARRIERS, IL *	IL	5,000	5,000	5,000	4,200	0
LRD	DES PLAINES RIVER, IL *	IL	3,300	3,875	7,000	7,000	6,385
MVD	EAST ST LOUIS, IL	IL	2,000	11,073	12,000	14,000	15,000
LRD	MCCOOK AND THORNTON RESERVOIRS, IL	IL	25,000	25,000	25,000	15,000	67,613
MVD	MISS RIVER BTWN THE OHIO AND MO RIVERS (REG WORKS), MO & IL	IL	580	580	580	12,560	12,560
LRD	OLMSTED LOCKS AND DAM, OHIO RIVER, IL & KY	IL	109,790	124,000	124,000	126,000	126,000
MVD	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI	IL	11,350	11,350	11,350	33,170	33,170
MVD	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI *	IL	2,400	1,210	0	0	0
MVD	WOOD RIVER LEVEE, IL	IL	1,170	1,993	3,600	3,600	3,600
LRD	LITTLE CALUMET RIVER, IN *	IN	20,000	20,837	0	0	0

**Table C-2: Construction Account, Enhanced Plan Scenario Continued
(\$ Thousands)**

NWD	TURKEY CREEK BASIN, KS & MO	KS	2,500	2,500	3,027	3,027	3,027
LRD	KENTUCKY LOCK AND DAM, TENNESSEE RIVER, KY	KY	1,000	19,000	32,000	38,000	41,085
LRD	MARKLAND LOCKS AND DAM, KY & IN (REHAB) *	KY	1,000	3,201	0	0	0
LRD	WOLF CREEK DAM, LAKE CUMBERLAND, KY *	KY	123,000	123,000	123,000	51,100	0
MVD	J BENNETT JOHNSTON WATERWAY, LA	LA	7,000	7,000	7,000	25,000	25,000
MVD	LAROSE TO GOLDEN MEADOW, LA (HURRICANE PROTECTION) *	LA	5,026	0	0	0	0
NAD	MUDDY RIVER, MA *	MA	4,000	4,000	9,609	10,000	6,223
NWD	BLUE RIVER CHANNEL, KANSAS CITY, MO	MO	5,600	5,600	8,900	8,900	5,996
MVD	CHESTERFIELD, MO	MO	3,331	4,177	8,382	8,500	9,000
SWD	CLEARWATER LAKE, MO *	MO	40,000	40,000	40,000	36,451	0
NWD	KANSAS CITYS, MO & KS *	MO	700	1,200	1,200	1,200	994
MVD	ST LOUIS FLOOD PROTECTION, MO *	MO	4,100	2,106	0	0	0
MVD	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI *	MO	3,579	0	0	0	0
NWD	MISSOURI R FISH AND WILDLIFE RECOVERY, IA, KS, MO, MT, NE, ND & SD	N/A	70,000	70,000	70,000	100,000	100,000
SAD	CAROLINA BEACH AND VICINITY, NC	NC	2,513	2,513	2,513	2,513	2,513
SAD	WEST ONSLOW BEACH AND NEW RIVER INLET, NC	NC	400	400	5,000	5,000	5,150
SAD	WILMINGTON HARBOR, NC	NC	1,800	1,800	1,800	1,800	1,800
NWD	GARRISON DAM, LAKE SAKAKAWEA, ND *	ND	8,620	9,800	9,800	10,000	10,261
NWD	ANTELOPE CREEK, NE *	NE	5,697	0	0	0	0
NAD	GREAT EGG HARBOR INLET AND PECK BEACH, NJ	NJ	13,500	13,500	13,500	13,500	20,000
NAD	RARITAN RIVER BASIN, GREEN BROOK SUB-BASIN, NJ	NJ	7,000	7,000	46,435	46,200	41,235
SPD	RIO GRANDE FLOODWAY, SAN ACACIA TO BOSQUE DEL APACHE, NM	NM	800	4,983	9,000	9,000	9,000
NAD	ATLANTIC COAST OF NYC, ROCKAWAY INLET TO NORTON POINT, NY	NY	3,000	3,000	3,000	4,100	4,100
NAD	FIRE ISLAND INLET TO MONTAUK POINT, NY	NY	5,800	5,800	9,700	9,700	9,500
NAD	LONG BEACH ISLAND, NY	NY	700	700	700	10,000	10,000
NAD	NEW YORK AND NEW JERSEY HARBOR, NY & NJ *	NY	64,716	69,262	88,766	100,000	52,673
LRD	DOVER DAM, MUSKINGUM RIVER, OH (DAM SAFETY ASSURANCE) *	OH	18,500	18,500	20,000	25,000	10,811
SWD	CANTON LAKE, OK *	OK	24,250	24,250	24,250	24,250	5,210
NWD	ELK CREEK LAKE, OR *	OR	500	0	0	0	0
NWD	LOWER COLUMBIA RIVER ECOSYSTEM RESTORATION, OR & WA *	OR	1,650	1,900	1,900	1,900	2,070
NWD	WILLAMETTE RIVER TEMPERATURE CONTROL, OR *	OR	11,000	3,331	0	0	0
LRD	EMSWORTH LOCKS AND DAM, OHIO RIVER, PA *	PA	25,000	18,533	0	0	0
LRD	LOCKS AND DAMS 2, 3 AND 4, MONONGAHELA RIVER, PA	PA	6,210	28,501	53,254	54,000	55,000
LRD	PRESQUE ISLE PENINSULA, PA (PERMANENT)	PA	1,000	1,000	1,000	1,000	1,000
SAD	PORTUGUES AND BUCANA RIVERS, PR *	PR	45,000	45,000	23,750	0	0
SAD	RIO PUERTO NUEVO, PR	PR	5,000	5,000	25,000	25,000	27,000
LRD	CENTER HILL LAKE, TN *	TN	56,000	56,000	56,000	8,712	0
LRD	CHICKAMAUGA LOCK, TENNESSEE RIVER, TN	TN	1,000	16,000	29,250	32,000	33,000
SWD	BRAYS BAYOU, HOUSTON, TX *	TX	86,500	86,500	86,500	28,852	0
SWD	SIMS BAYOU, HOUSTON, TX *	TX	30,280	0	0	0	0
SWD	TEXAS CITY CHANNEL (50-FOOT PROJECT), TX *	TX	8,000	8,000	8,000	12,000	10,039

**Table C-2: Construction Account, Enhanced Plan Scenario Continued
(\$ Thousands)**

NAD	AIWW, BRIDGES AT DEEP CREEK, VA *	VA	1,500	1,500	35,500	6,100	5,000
SAD	JOHN H KERR LAKE, VA & NC *	VA	16,915	0	0	0	0
NAD	NORFOLK HARBOR AND CHANNELS, CRANEY ISLAND, VA	VA	28,500	28,500	28,500	28,500	28,500
SAD	ROANOKE RIVER UPPER BASIN, HEADWATERS AREA, VA *	VA	1,075	1,075	2,100	2,200	3,093
NWD	CHIEF JOSEPH DAM GAS ABATEMENT, WA *	WA	1,000	1,625	1,625	1,625	1,625
NWD	COLUMBIA RIVER FISH MITIGATION, WA, OR & ID	WA	95,800	95,800	95,800	135,000	135,000
NWD	COLUMBIA RIVER TREATY FISHING ACCESS SITES, OR & WA	WA	500	500	3,000	3,000	3,000
NWD	DUWAMISH AND GREEN RIVER BASIN, WA	WA	2,600	2,600	7,002	7,100	7,444
NWD	HOWARD HANSON DAM, WA *	WA	13,000	0	0	0	0
NWD	LOWER SNAKE RIVER FISH & WILDLIFE COMPENSATION, WA, OR & ID	WA	1,500	1,500	1,500	1,500	1,500
NWD	MT ST HELENS SEDIMENT CONTROL, WA	WA	10,600	10,600	10,600	10,600	10,600
NWD	MUD MOUNTAIN DAM, WA	WA	400	400	400	400	4,000
MVD	UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO & WI	WI	3,100	0	0	0	0
LRD	BLUESTONE LAKE, WV *	WV	86,700	69,577	0	0	0

Total - Construction (Listed under States)	1,722,020	1,763,696	1,815,479	1,844,905	1,684,148
Additional Projects and Programs (including CAP's and Remaining Items)	0	0	0	31,842	259,599
Continuing Authorities Programs	28,545	28,631	28,688	29,262	29,262
Remaining Items	79,435	79,673	79,832	79,992	79,992
Total - Construction Appropriations	1,830,000	1,872,000	1,924,000	1,986,000	2,053,000

* Denotes Projects Completing

Table C-3: Continuing Authority Program Projects

CAP Section	CAP Project Name	District
14	CANADAWAY SEWERLINE	LRB
14	CAYUGA CREEK, DEPEW, NY	LRB
14	COLD CREEK, HUME, NY	LRB
14	CUYAHOGA RIVER, BATH ROAD, AKRON, OH	LRB
14	CUYAHOGA RIVER, RIVERBED STREET, OH	LRB
14	CUYAHOGA RIVER, VAUGHN RD, OH	LRB
14	ELLCOTT CK WILLIAMSVILLE, NY	LRB
14	GENESEE RIVER, CANEADEA, NY	LRB
14	GRAND RIVER, PAINESVILLE, OH (SR84 BRIDGE)	LRB
14	LAKE ONTARIO ALBION WATER	LRB
14	OLD FORT NIAGARA, YOUNGSTOWN, NY	LRB
14	RANSOM CREEK, HOPKINS ROAD, AMHERST, NY	LRB
14	SWAN CREEK, CITY OF TOLEDO, OH	LRB
14	SWAN CREEK, SOUTH TOLEDO, OH	LRB
14	TONAWANDA CREEK, NEWSTEAD, NY	LRB
14	CHICAGO RIDGE, IL	LRC
14	LAKE MICHIGAN INTERCEPTOR, HIGHLAND PARK, IL	LRC
14	NORTH PARK	LRC
14	BAILEYS HARBOR, DOOR COUNTY, WI	LRE
14	DETROIT RIVER, BELLE ISLE PARK, DETROIT, MI	LRE
14	GRAND RIVER (NOWS), GRAND HAVEN, MI	LRE
14	KENOSHA HARBOR, RETAINING WALL, KENOSHA, WI	LRE
14	KINNICKINNIC RIVER STORM SEWER, MILWAUKEE COUNTY, WI	LRE
14	MOSEL, SHEBOYGAN COUNTY, WI	LRE
14	NORTH SHORE DRIVE, SOUTH BEND, IN	LRE
14	THIEME DRIVE, FORT WAYNE, IN	LRE
14	WATER TREATMENT PLANT, ST JOSEPH, MI	LRE
14	7TH ST W SEC 14, OHIO RIVER, HTGN	LRH
14	ADAMS TOWNSHIP, WASHINGTON COUNTY, OH	LRH
14	BELPRE, OH SEWER AND WATERLINE PROTECTION	LRH
14	CITY OF BELPRE, OH	LRH
14	COSHOCTON COUNTY, TOWNSHIP ROAD 263, OH (SECTION 14)	LRH
14	COSHOCTON COUNTY, TOWNSHIP ROAD 274, OH (SECTION 14)	LRH
14	IRONTON RIVERFRONT, OH	LRH
14	KANAWHA RIVER, CHARLESTON, WV (MAGIC ISLAND TO PATRICK STREE	LRH
14	KENOVA, WATER TREATMENT PLANT, WV	LRH
14	LOGAN HIGH SCHOOL, GUYANDOTTE RIVER, LOGAN COUNTY, WV	LRH
14	MARIETTA, OH WASTEWATER TREATMENT PLANT	LRH
14	MUSKINGUM TOWNSHIP, WASHINGTON COUNTY, OH	LRH
14	NEW MARTINSVILLE, WV	LRH
14	OHIO RIVER, HUNTINGTON, STAUNTON, WV	LRH
14	PEPPER'S FERRY, VA	LRH

CAP Section	CAP Project Name	District
14	WALKER LN, WASHINGTON, WV	LRH
14	WASHINGTON COUNTY, WARREN TOWNSHIP, TOWNSHIP ROAD 720, RIVER LANE, OH	LRH
14	BEAVER CK WASTEWATER TREATMENT PLANT, GREENE CO	LRL
14	BLUFFTON, WELLS COUNTY, IN	LRL
14	CROOKED CREEK, MADISON, IN	LRL
14	DEERFIELD TOWNSHIP, WAREN, OH	LRL
14	EEL RIVER, CLAY COUNTY, IN (SECTION 14)	LRL
14	HODGENVILLE, KY	LRL
14	ROCKPORT, IN	LRL
14	SOUTH HARRISON CO., WATER CORP., IN	LRL
14	SOUTH HARRISON COUNTY, IN	LRL
14	WHITE RIVER KNOX CO, IN	LRL
14	BRITTON CREEK, HENDERSONVILLE, TN	LRN
14	CHATTANOOGA SEWERLINE FAILURE, TN	LRN
14	CLIFTON, TN	LRN
14	HENDERSONVILLE, NC	LRN
14	KINGSPORT, TN	LRN
14	MOSS-WRIGHT PARK, GOODLETTSVILLE, TN	LRN
14	OAKDALE, TN	LRN
14	RIVERSIDE DRIVE, CLARKSVILLE, TN	LRN
14	TN STATE UNIV, NASHVILLE, TN	LRN
14	UT AG CENTER, KNOXVILLE, TN	LRN
14	BRADYS RUN, CHIPPEWA TOWNSHIP, PA	LRP
14	LICK RUN, SOUTH PK, PA	LRP
14	LINCOLN BOROUGH, PA (SECTION 14)	LRP
14	MONONGAHELA RIVER, WEST ELIZABETH, PA	LRP
14	NEW CASTLE, PA (NESHANNOCK CREEK)	LRP
14	SALAMANCA, NY	LRP
14	WESTON, WV (US RT 19 S)	LRP
14	WORTHINGTON, WV	LRP
14	HWY 237, SULPHUR RIVER, AR	MVK
14	SKUNA RIVER, CALHOUN COUNTY, MS	MVK
14	WEST MADISON UTILITY DISTRICT, CANTON, MS	MVK
14	FINELY, TN	MVM
14	GERMANTOWN, LATERAL D, SEC 14	MVM
14	HARRIS FORK CREEK, KY	MVM
14	MILL CREEK, LAUDERDALE COUNTY, TN	MVM
14	MT. MORIAH CULVERT SECT 14	MVM
14	RED DUCK - NINETH STREET, KY #14	MVM
14	WOLF RIVER TRIBUTARIES P1, SHELBY COUNTY, TN	MVM
14	LOUISIANA STATE HIGHWAY 75, IBERVILLE PARISH, LA	MVN
14	SOUTHERN UNIVERSITY PEDESTRIAN WALKWAY, LA	MVN
14	SOUTHERN UNIVERSITY, CAMPUS ROAD, BATON ROUGE, LA	MVN
14	TUCKER ROAD, COMITE RIVER, LA	MVN

CAP Section	CAP Project Name	District
14	CASS LAKE, LEECH LAKE TRIBE	MVP
14	CROW RIVER CR 50, MN	MVP
14	ELK RIVER, SHERBURNE CO.	MVP
14	FT ABERCROMBIE, ND	MVP
14	HO CHUNK NATION, WI	MVP
14	MINNEHAHA CREEK WALLS, MN	MVP
14	RED LAKE RIVER, MN	MVP
14	SARTELL, MN	MVP
14	BEAR CREEK, ROLAND, IA	MVR
14	CEDAR RIVER, 290TH ST BRIDGE, CEDAR COUNTY, IA	MVR
14	COAL CREEK, ALBIA, MONROE CO., IA	MVR
14	DES MOINES RIVER, KEOSAUGUA, IA	MVR
14	EDWARDS RIVER, SEWAGE LAGOONS, VILLAGE OF MATHERVILLE, IL	MVR
14	FOX RIVER, 151 COUNTY ROAD BRIDGE, CLARK COUNTY, MO (SECTION 14)	MVR
14	FOX RIVER, KAHOKA, MO (STREAM BANK PROTECTION)	MVR
14	IA RVR, IA CITY, JOHNSON CO., IA	MVR
14	MAZON CREEK, WHITETIE ROAD, GRUNDY COUNTY, IL	MVR
14	NORTH RACCOON RIVER, PERRY, IA	MVR
14	NORTH SKUNK RIVER, POWISHIEK, IA	MVR
14	SPRINGDALE CEMETERY, PEORIA, IL	MVR
14	BRUSH CREEK, MONROE COUNTY, MO	MVS
14	CAPE LA CROIX, MO	MVS
14	SHOTWELL CREEK, WILDWOOD, MO	MVS
14	GENERAL CLINTON PARK, NY	NAB
14	LIDY'S CREEK, CENTER STREET, PA	NAB
14	PATUXENT RIVER, PATUXENT BEACH ROAD, MD	NAB
14	AROOSTOOK RIVER, MAPLETON, ME	NAE
14	CONNECTICUT RIVER, MIDDLETOWN, CT	NAE
14	HOLMES BAY [STATE HIGHWAY RTE 191], WHITING, ME	NAE
14	QUODDY NARROWS, SOUTH LUBEC ROAD, LUBEC, ME	NAE
14	SLACK BROOK, LEOMINSTER, MA	NAE
14	SOUTH RIVER, CONWAY, MA	NAE
14	WESTFIELD RIVER, AGAWAM, MA	NAE
14	WESTFIELD RIVER, OLD RTE 9, CUMMINGTON, MA	NAE
14	COUNTY CENTER, NY	NAN
14	ELIZABETH RIVER, VALLEYVIEW ROAD, HILLSIDE, NJ	NAN
14	GARTH WOODS, NY	NAN
14	HARNEY ROAD, NY	NAN
14	LONG ISLAND SOUND, NY	NAN
14	MT. PLEASANT AVE., MALAPARDIS BROOK, HANOVER, NJ	NAN
14	ORIENT HARBOR, SOUTHOLD, NY	NAN
14	ORIENT HARBOR, SOUTHOLD, NY	NAN
14	SOUTH BRANCH,RAHWAY RIVER,WOODBIDGE,NJ	NAN
14	YONKERS AVE, TUCKAHOE, NY	NAN

CAP Section	CAP Project Name	District
14	JAMES RIVER BANK STABILIZATION, AMHERST COUNTY, VA	NAO
14	JAMES RIVER CHANNEL, VA	NAO
14	BRODHEAD CREEK, PA	NAP
14	EAST POINT, NJ	NAP
14	MANASQUAN R ,HOWELL TWP, NJ BD612	NAP
14	MT. HOLLY, NJ (RANCACAS CREEK)	NAP
14	NORTH COVENTRY, PA	NAP
14	TOAD CREEK, TOPTON, PA	NAP
14	TRENTON MARINE TERMINAL, TRENTON, NJ	NAP
14	ARGOSY ROAD BRIDGE, RIVERSIDE, MO	NWK
14	BIG BLUE RIVER, SEWARD COUNTY	NWK
14	BRIDGE 617, WORTH, MO	NWK
14	COLUMBIA, MO (WATER MAIN)	NWK
14	COUNTY RIVER 400 BRIDGE	NWK
14	GENTRY COUNTY, GENTRYVILLE, MO	NWK
14	GENTRYVILLE BRIDGE, GRAND RIVER	NWK
14	GOLDEN EAGLE BANK EROSION	NWK
14	I-29 PLATTE RIVER BRIDGE, MO	NWK
14	IOWA TRIBE HIGHWAY BRIDGE, NE	NWK
14	IOWA TRIBE PUMP STATION, NE	NWK
14	KANSAS RIVER, EUDORA BEND BRIDGE, KS	NWK
14	PLATTE CITY SEWER, PLATTE CITY, MO	NWK
14	PLATTE RIVER BRIDGE, CONCEPTION, MO	NWK
14	ROUTE EE BRIDGE, SULLIVAN CITY, MO	NWK
14	SMOKY HILL RIVER, KS	NWK
14	SOUTH FORK CLEAR CREEK, ROUTE FF, MARYVILLE, MO	NWK
14	STRANGER CREEK AT K-32, KS	NWK
14	ALLEN CREEK SW OF MAGNOLIA, IA	NWO
14	CEDAR RIVER AT FULLERTON, NE	NWO
14	JAMESTOWN (NW), ND	NWO
14	JAMESTOWN (SE), ND	NWO
14	NISHNABOTNA RIVER, MILLS COUNTY, IA	NWO
14	WILLOW CREEK NE OF MAGNOLIA, IA	NWO
14	WILLOW CREEK NW OF WOODBINE, IA	NWO
14	ST JOHNS LANDFILL, OR	NWP
14	NORTH FORK NOOKSACK BANK PROTECTION, WA (SECTION 14)	NWS
14	TWIN BRIDGES, MADISON COUNTY, RIRIE, ID	NWW
14	CHEFORNAK BANK PROTECTION	POA
14	DEERING STREAMBANK PROTECTION, AK	POA
14	EMMONAK RIVERBANK EROSION, AK	POA
14	KWETHLUK, AK	POA
14	LIME VILLAGE, AK	POA
14	NAKNEK, AK	POA
14	NAPAKIAK, AK	POA

CAP Section	CAP Project Name	District
14	SELAWIK, AK	POA
14	SEWARD, AK	POA
14	SHISMAREF STREAMBANK PROTECTION	POA
14	ST. MICHAEL, AK	POA
14	HAUULA HIGHWAY, OAHU, HI	POH
14	KAAAWA HIGHWAY, OAHU, HI	POH
14	ROCKY BRANCH, SC (SECTION 14)	SAC
14	RIO CAGUITAS CAGUAS, PR	SAJ
14	27TH STREET BRIDGE, GLENWOOD SPRINGS, CO	SPA
14	LA JOYA, NM	SPA
14	RIO PUERCO R, I-40 BRIDGE, GALLUP, NM	SPA
14	SAND COVE PARK, SACRAMENTO RIVER, CA	SPK
14	CITY CREEK, HIGHLAND, CA	SPL
14	HAVASUPAI STREAMBANK PROTECTION, AZ	SPL
14	POLACCA AIRPORT, AZ	SPL
14	POPPET CREEK, SOBOBA INDIAN RESERVATION, CA	SPL
14	COLORADO RIVER, CALDWELL LANE, TRAVIS COUNTY, TX	SWF
14	NOKOMIS RD, TEN MILE CREEK, LANCASTER, TX	SWF
14	ROGERS HILL ROAD AT AQUILLA CREEK, TX	SWF
14	HIGHWAY 164 BRIDGE, LITTLE PINEY CREEK, HAGARVILLE, AR	SWL
14	HIGHWAY 58, GUION, AR	SWL
14	OLD GRAND GLAISE, JACKSON COUNTY, AR	SWL
14	U.S. HIGHWAY 71 BRIDGE, RED RIVER, OGDEN, AR	SWL
14	WHITE RIVER, AUGUSTA, AR	SWL
14	KEETONVILLE ROAD, OK	SWT
14	LUTHER ROAD, JONES, OK	SWT
14	PONCA TRIBAL GROUNDS, EMERGENCY STREAMBANK, OK	SWT
103	BRODERICK PARK, BUFFALO, NY	LRB
103	LAKE ERIE AT PAINESVILLE	LRB
103	LAKE ERIE ATHOL SPRINGS, NY	LRB
103	LASALLE PARK, BUFFALO, NY	LRB
103	BAYOU TECHE SHORELINE EROSION RESTORATION, ST. MARY PARISH,A	MVN
103	CONQUEST PRESERVE, QUEEN ANNE'S COUNTY, MD	NAB
103	FRANKLIN POINT PARK, ANNE ARUNDEL COUNTY, MD	NAB
103	MAYO BEACH PARK, ANNE ARUNDEL COUNTY, MD	NAB
103	PLEASURE ISLAND, BALTIMORE COUNTY, MD	NAB
103	ST. MARY'S RIVER, ST. MARY'S COUNTY, MD	NAB
103	COASTAL AREAS, MARSHFIELD, MA	NAE
103	ENDERS ISLAND, MYSTIC, CT	NAE
103	NANTASKET BEACH, HULL, MA	NAE
103	PROSPECT BEACH, WEST HAVEN, CT BD434	NAE
103	WEST HAVEN BEACHES CT	NAE
103	WOODMONT BEACH, CT	NAE
103	CRESCENT BEACH, NY	NAN

CAP Section	CAP Project Name	District
103	CHESAPEAKE BAY SHORELINE, HAMPTON, VA	NAO
103	INDIAN RIVER INLET, SUSSEX COUNTY, DE	NAP
103	PHILADELPHIA SHIPYARD, PA	NAP
103	SEASIDE PARK (SHORE PROTECTION), NJ	NAP
103	SEC 103 LINCOLN PARK	NWS
103	GOLOVIN, AK	POA
103	NELSON LAGOON SDR, AK	POA
103	NOME SHORELINE PROTECTION	POA
103	POINT HOPE, AK	POA
103	SHAKTOOLIK FUEL TANKS, AK	POA
103	SHAKTOOLIK SHORELINE PROTECTION, SHAKTOOLIK, AK	POA
103	SHISHMAREF, AK	POA
103	UNALAKLEET STORM DAMAGE REDUCTION, UNALAKLEET, AK	POA
103	F-1 FUEL PIER, GUAM	POH
103	INARAJAN SJORE PROTECTION GUAM	POH
103	LELOALOA SHORE PROTECTION, AMERICAN SAMOA	POH
103	TALOFOFO BEACH PARK, GUAM	POH
103	UMATAC BAY, GUAM	POH
103	MORRIS ISLAND LIGHTHOUSE, ATLANTIC OCEAN, SC	SAC
103	FORT SAN GERONIMO, PR	SAJ
103	HWY 187, PINONES, PR	SAJ
103	TARPON SPRINGS, FL	SAJ
103	VETERAN'S DRIVE SHORELINE, ST.THOMAS, U.S.V.I.	SAJ
103	GOLETA BEACH, CITY OF GOLETA, CA	SPL
103	NICHOLAS CANYON BEACH RESTORATION, CA	SPL
103	PISMO BEACH, CA	SPL
103	BAY FARMS ISLAND DIKE, CA	SPN
107	COOLEY CANAL HARBOR, OH (SECTION 107)	LRB
107	OGDENSBURG, NY	LRB
107	OLCOTT HARBOR, NEWFANE, NY	LRB
107	WALNUT CREEK, PA	LRB
107	DULUTH HARBOR (MCQUADE ROAD), MN	LRE
107	GRAND MARAIS, MI	LRE
107	GRAND MARAIS, MN	LRE
107	GRAND PORTAGE HARBOR, MN	LRE
107	KNIFE HARBOR, MN	LRE
107	LAKE SHORE STATE PARK, MILWAUKEE, WI	LRE
107	MACKINAC ISLAND HARBOR BREAKWATER, MI	LRE
107	NORTHERN MICHIGAN COLLEGE, TRAVERSE CITY, MI	LRE
107	ONTONAGON RIVER, MI	LRE
107	TWO HARBORS, MN	LRE
107	OHIO RIVER, PROCTORVILLE, OH	LRH
107	EVANSVILLE STILLWATER HARBOR, IN	LRL
107	CLARKSVILLE, TN (MARINA)	LRN

CAP Section	CAP Project Name	District
107	RED RIVER PORT, CLARKSVILLE, TN	LRN
107	BLYTHEVILLE HARBOR, AR	MVM
107	NORTHWEST TENNESSEE REGIONAL HARBOR, LAKE COUNTY, TN	MVM
107	BAYOU PETIT CAILLOU, LA	MVN
107	NAPOLEAN AVENUE CONTAINER TERMINAL ACCESS, NEW ORLEANS, LA	MVN
107	PORT FOURCHON EXTENSION, LAFOURCHE PARISH, LA	MVN
107	SHORT CUT CANAL DEEPEINING, TERREBONNE PARISH, LA	MVN
107	EAST TWO RIVER, TOWER, MN	MVP
107	HONGA RIVER, DORCHESTER COUNTY, MD	NAB
107	NANTICOKE HARBOR, MD	NAB
107	RHODES POINT, MD	NAB
107	ROCKHOLD CREEK, MD	NAB
107	ST. JEROME CREEK, ST. MARY'S COUNTY, MD	NAB
107	BASS HARBOR, TREMONT, ME	NAE
107	BLACKWATER RIVER, HAMPTON HARBOR, NH	NAE
107	BUCKS HARBOR, MACHIASPORT, ME	NAE
107	CHARLESTOWN BREACHWAY & NINIGRET POND, CHARLESTOWN, RI	NAE
107	COREA HARBOR, ME	NAE
107	EAST BOAT BASIN, SANDWICH, MA	NAE
107	LYNN HARBOR (SEC107), LYNN, MA	NAE
107	OAKS BLUFF HARBOR, MARTHA'S VINEYARD, MA	NAE
107	POINT JUDITH HARBOR (SEC107), RI	NAE
107	ROUND POND HARBOR, BRISTOL, ME	NAE
107	WOODS HOLE GREAT HARBOR, FALMOUTH, MA	NAE
107	BELFORD HARBOR	NAN
107	KEYPORT HARBOR, NJ	NAN
107	FISHERMANS COVE, NORFOLK, VA	NAO
107	NASSAWADOX CREEK, NORTHAMPTON COUNTY, VA	NAO
107	PUT-IN CREEK, MATHEWS COUNTY, VA	NAO
107	STARLINGS CREEK, SAXIS, VA	NAO
107	TANGIER ISLAND JETTY, ACCOMACK COUNTY, VA	NAO
107	SALEM RIVER, NJ (CHANNEL DEEPENING)	NAP
107	SCHUYLKILL RIVER AT GIRARD POINT, NJ	NAP
107	TURNING BASIN, FAIRLESS HILLS, PA	NAP
107	COLUMBIA RIVER NAVIGATION IMPROVEMENTS (CAP), OR	NWP
107	NEAH BAY CHANNEL, WA (SECTION 107)	NWS
107	AUKE BAY NAVIGATION IMPROVEMENTS, AK	POA
107	COLD BAY NAVIGATION IMPROVEMENTS	POA
107	DOUGLAS HARBOR, AK	POA
107	ELIM NAVIGATION IMPROVEMENTS	POA
107	GUSTAVUS NAVIGATION IMPROVEMENTS, AK	POA
107	IGIUGIG NAVIGATION IMPROVEMENTS, IGIUGIG, AK	POA
107	KASAAN NAVIGATION IMPROVEMENT, AK	POA
107	KING COVE HARBOR, AK	POA

CAP Section	CAP Project Name	District
107	KOKHANOK HARBOR, AK	POA
107	NANWALEK NAVIGATION IMPROVEMENTS, AK	POA
107	OLD HARBOR, KODIAK, AK	POA
107	OUZINKIE SMALL BOAT HARBOR, AK	POA
107	PORT GRAHAM NAVIGATION IMPROVEMENTS, CHEFORNAK, AK	POA
107	SAVOONGA, AK	POA
107	SEWARD MARINE INDUSTRIAL CENTER NAVIGATION IMPROVEMENT, AK	POA
107	SMALL NAVIGATION IMPROVEMENTS, ILIAMNA, AK	POA
107	TATITLEK, AK	POA
107	WILLIAMSPORT, AK	POA
107	APRA SMALL BOAT HARBOR, GUAM	POH
107	AUASI SMALL BOAT HARBOR, AMERICAN SAMOA	POH
107	AUNUU SMALL BOAT HARBOR, AMERICAN SAMOA	POH
107	HILO LIGHT DRAFT, HAWAII	POH
107	KAHO'OLAWA SMALL BOAT HARBOR, HI	POH
107	KAHULUI SBH, MAUI, HI 000	POH
107	NORTH KOHALA NAVIGATION, HI	POH
107	OUTER COVE MARINA, CNMI	POH
107	ROTA EAST HARBOR, CM	POH
107	BAYOU BERNARD INDUSTRIAL SEAWAY, MS	SAM
107	BRUN HARBOR IMPROVEMENTS, GA	SAS
107	PORT HUENEME, CA	SPL
107	CENTRAL BASIN PIER 70 DREDGING, CA	SPN
107	OYSTER POINT MARINA	SPN
107	GALVESTON ISLAND HARBOR , GALVESTON, TX	SWG
107	ARKANSAS RIVER, RUSSELLVILLE HARBOR, AR	SWL
107	LAVACA PORT, ARKANSAS RIVER, AR (SECTION 107)	SWL
111	FAIRPORT HARBOR, OH	LRB
111	OKLAHOMA BEACH, NY (SECTION 111)	LRB
111	VERMILLION HARBOR, OH	LRB
111	BURNS HARBOR, IN	LRC
111	GRAND RIVER (NOWS), GRAND HAVEN, MI	LRE
111	MANISTEE HARBOR & RIVER CHANNEL, MI	LRE
111	ONTONAGON HARBOR, MI	LRE
111	LOOMIS LANDING, AR	MVM
111	CAMP ELLIS, SACO, MAINE	NAE
111	MATTITUCK HARBOR, NY	NAN
111	WHITCOM FLATS, WA	NWS
111	AGUADILLA COAST LINE SECT 111	SAJ
111	MOBILE PASS, AL	SAM
111	PRINCETON SHORELINE, CA	SPN
204	ASHTABULA RSM, OH	LRB
204	BUFFALO RIVER, NY	LRB
204	CLEVELAND HARBOR RSM, OH	LRB

CAP Section	CAP Project Name	District
204	MAUMEE BAY HABITAT RESTORATION, OH	LRB
204	OHIO STATEWIDE RSM, OH	LRB
204	OTTAWA RIVER, OH	LRB
204	PRESQUE ISLE RSM, PA	LRB
204	TOLEDO HARBOR RSM, OH (SECTION 204)	LRB
204	WYNN ROAD, OREGON, OH	LRB
204	ILLINOIS BEACH STATE PARK, IL	LRC
204	MICHIGAN CITY, IN	LRC
204	21ST AVE WEST CHANNEL, DULUTH MINN	LRE
204	RESTORATION OF CAT ISLANDS CHAIN, WI	LRE
204	ATACHAFALAYA RIVER, SHELL ISLAND PASS, ST MARY PARISH, LA	MVN
204	BARATARIA BAY WATERWAY, MILE 6.0-0.0, PLAQUEMINES PARISH, LA	MVN
204	CALCASIEU RIVER, MILE 5.0 - 14.0, CAMERON PARISH, LA	MVN
204	HOUMA NAVIGATION CANAL BARRIER ISLAND RESTORATION, LA	MVN
204	HOUMA NAVIGATION CANAL CAT ISLAND PASS, LA	MVN
204	BLACKHAWK BOTTOMS, DES MOINES COUNTY, IA	MVR
204	HENDERSON #3 HABITAT RESTORATION PROJECT	MVR
204	CAPE COD CANAL, SANDWICH, MA	NAE
204	CHATHAM STAGE HARBOR, CHATHAM, MA	NAE
204	NEWBURYPORT HARBOR (SEC204), MA	NAE
204	PLUMB BEACH, JAMAICA BAY, NY	NAN
204	BARNEGAT INLET RSM, NJ	NAP
204	DEL ESTUARY RSM, NJ,PA,DE	NAP
204	HAZELTON, PA (ACID MINE RECLAMATION)	NAP
204	LEWES AND REHOBOTH CANAL, DE	NAP
204	SCHUYLKILL WATERSHED RESTORATION, PA	NAP
204	WALTER RESERVOIR RESTORATION, PA	NAP
204	KANSAS RIVER BASIN LAKES - RSM PLAN	NWK
204	MISSOURI RIVER RSM PLAN	NWO
204	COLUMBIA RIVER RSM, OR & WA	NWP
204	SNAKE RIVER RSM PLANNING, ID	NWW
204	AIWW REG SED PLAN, SC	SAC
204	CHARLESTON HRBR REG SED PLAN, SC	SAC
204	GEORGETOWN HRBR REG SED PLAN, SC	SAC
204	MURRELL'S INLET REG SED PLAN, SC	SAC
204	SANTEE SELTA REG SED PLAN, SC	SAC
204	SC COAST REGIONAL SEDIMENT MANAGEMENT	SAC
204	NORTHEAST FLORIDA RSM PLANNING, FL	SAJ
204	SOUTHEAST FLORIDA RSM PLANNING, FL	SAJ
204	SOUTHWEST FLORIDA RSM PLANNING, FL	SAJ
204	TAMPA BAY RSM PLANNING, FL	SAJ
204	GULF COAST REGIONAL SEDIMENT MANAGEMENT PLANNING	SAM
204	BRUNSWICK HARBOR RSM, GA	SAS
204	MANTEO OLD HOUSE CHANNEL, NC	SAW

CAP Section	CAP Project Name	District
204	STATE BEACH & INLET MGMT PLAN, RSM, NC	SAW
204	WANCHESE MARSH CREATION AND PROTECTION, NC	SAW
204	REGIONAL SEDIMENT MANAGEMENT STUDY, CA (SECTION 204)	SPL
204	NUECES DELTA AND BAY, TX	SWF
204	SOUTH PADRE ISLAND, TX	SWG
204	LITTLE ROCK SLACKWATER HARBOR, AR (SECTION 204)	SWL
204	JOHN REDMOND (SECTION 204), OK	SWT
204	MCCLELLAND-KERR (SECTION 204), OK	SWT
205	205 LIMESTONE CREEK, FAYETTEVILLE, NY	LRB
205	BIG SISTER CREEK , NY	LRB
205	BLANCHARD RIVER, FINDLAY, OH	LRB
205	BLANCHARD RIVER, OTTAWA, OH	LRB
205	CAZENOVIA CREEK, BFLO, NY	LRB
205	CHAGRIN RIVER, EASTLAKE OH	LRB
205	CITY OF INDEPENDENCE, OH	LRB
205	COUNTY OF ERIE AT SANDUSKY, OH	LRB
205	CUYAHOGA RIVER, BRECKSVILLE, OH	LRB
205	EIGHTEENMILE CREEK, BOSTON	LRB
205	ELLCOTT CK WILLIAMSVILLE, NY	LRB
205	GRAND RIVER, PAINSVILLE AND FAIRPORT, OH	LRB
205	THATCHER BROOK, GOWANDA, NY	LRB
205	TINKERS CREEK, STREETSBORO, OH	LRB
205	VALLEY VIEW, OH	LRB
205	VERMILION RIVER, NY	LRB
205	DEER CREEK, VILLAGE OF FORD HEIGHTS, IL	LRC
205	FOX RIVER MCHENRY COUNTY IL BE041	LRC
205	KANKAKEE RIVER & NEWTON COUNTY	LRC
205	LIBERTYVILLE ESTATES IL	LRC
205	MONTICELLO AVENUE ILLINOIS BE051	LRC
205	SOUTH SUBURBAN AREA OF CHICAGO, IL	LRC
205	VALLEYVIEW, IL	LRC
205	CASS RIVER SPAULDING TOWNSHIP, MI	LRE
205	DETROIT BEACH, LAKE ERIE, FRENCHTOWN TOWNSHIP, MI	LRE
205	MACOMB COUNTY, MI	LRE
205	ST. MARY'S RIVER, FORT WAYNE, IN	LRE
205	UNDERWOOD CREEK, VILLAGE OF ELM GROVE, WAUKERSHA COUNTY, WI	LRE
205	WAKEFIELD, MI	LRE
205	ATHENS (RICHLAND AVENUE), OH	LRH
205	BARBERTON, OH	LRH
205	CITY OF WILLIAMSTOWN, WV	LRH
205	DUCK CREEK, OH FWS	LRH
205	GRANDVIEW HEIGHTS, OH	LRH
205	HUGHES CREEK, WV	LRH
205	MAGAZINE BRANCH, ELK RIVER, CHARLESTON, WV	LRH

CAP Section	CAP Project Name	District
205	MANSFIELD, ROCKY FORK, OH	LRH
205	MORRIS CREEK, WV	LRH
205	SHELBY, BLACKFORK, OH	LRH
205	SUMMIT-UPPER TUSCARAWAS, OH	LRH
205	TUSCARAWAS BEAVERDAM CREEK, OH	LRH
205	WEST VIRGINIA STATEWIDE FLOOD WARNING SYSTEM, WV	LRH
205	ZIMBER DITCH, STARK CO, OH	LRH
205	AMBERLEY CREEK, CINCINNATI, OH	LRL
205	BANLICK CREEK, KENTON CO., KY	LRL
205	BEAVER CREEK, FRENCHBURG, KY	LRL
205	CITY OF BLUFFTON, WELLS CO	LRL
205	DELPHI, OH DEER CREEK LVE, IN	LRL
205	DUGAN RUN, URBANA, OH	LRL
205	ELIZABETHTOWN, KY	LRL
205	FEATHER CREEK CLINTON, IN	LRL
205	FLEMING-NEON, KY	LRL
205	HINKSTON CREEK, MT STERLING, KY	LRL
205	KNOX COUNTY KELSO CREEK IN	LRL
205	LAMOTTE CREEK, PALESTINE, IL	LRL
205	METROPOLITAN LOUISVILLE, BEARGRASS CREEK, KY	LRL
205	PLEASANT CREEK, GREENWOOD, IN	LRL
205	ROLLING FK RF,LEBANON JUNC ,KY	LRL
205	ROUGH RIVER LAKE, KY	LRL
205	RUSSELLS POINT, OH	LRL
205	WHITE RIVER, ANDERSON, IN	LRL
205	YOUNG'S CREEK FLOODING, FRANKLIN, IN	LRL
205	BEAVER CREEK & TRIBS, BRISTOL, TN	LRN
205	BEAVER CREEK AND TRIBS, BRISTOL, VA	LRN
205	BIG BIGBY CREEK, SANDY HOOK, TN	LRN
205	DALLAS BRANCH AND PIN HOOK CREEK, HUNTSVILLE, AL	LRN
205	FIRST CREEK, KNOXVILLE, TN	LRN
205	HOMINY CREEK WATERSHED, NC	LRN
205	HOPKINSVILLE, KY	LRN
205	LITTLE LIMESTONE CR, JONESBOROUGH, TN	LRN
205	METRO CENTER LEVEE, NASHVILLE, TN	LRN
205	MILL CREEK FLOOD WARNING SYSTEM, TN	LRN
205	PIGEON RIVER WATERSHED, NC	LRN
205	SEVEN MILE CREEK, TN	LRN
205	SWANNANOA RIVER WATERSHED, NC	LRN
205	CHALFANT & SAWMILL, WILKINS TOWNSHIP, PA	LRP
205	ELLCOTTVILLE, NY	LRP
205	LITTLE YANKEE RUN WATERSHED STUDY	LRP
205	PAINT CREEK WINDBER CAMBRIA COUNTY, PA	LRP
205	PINE CREEK, ALLEG COUNTY, PA	LRP

CAP Section	CAP Project Name	District
205	ROBINSON RUN, ALLEG COUNTY, PA	LRP
205	YELLOW & LITTLE CREEK,JEFF COUNTY, OH	LRP
205	ALSAM ROAD, LA	MVK
205	LITTLE COPIAH CREEK, MS	MVK
205	MCKINNEY BAYOU, TUNICA COUNTY, MS	MVK
205	RED CHUTE BAYOU LEVEE, BOSSIER CITY, LA	MVK
205	WILLIAMSVILLE, PHILADELPHIA, MS	MVK
205	ARLINGTON, KY	MVM
205	CACHE RIVER BASIN, GRUBBS, AR	MVM
205	CHARLESTON, MO	MVM
205	COTTONWOOD SLOUGH PUMP STATION, IL	MVM
205	GRUBBS, AR	MVM
205	INDIAN BAYOU - INDIAN BAYOU DITCH, AR	MVM
205	LITTLE RIVER DIVERSION, DUTCHTOWN, MO	MVM
205	MILLINGTON, TN	MVM
205	RED DUCK CREEK, KY #205	MVM
205	SEC 205 RECON STD IN ARLINGTON, KY	MVM
205	SPRING CREEK ST FRANCIS COUNY AR	MVM
205	WYNNE, AR #205	MVM
205	BAYOU QUEUE DE TORTUE, VERMILLION PARISH, LA	MVN
205	GOOSE BAYOU BASIN, JEFFERSON PARISH, LA	MVN
205	INTRACOASTAL CANAL, EAST LAFOURCHE PARISH, LA	MVN
205	JEAN LAFITTE, FISHER SCHOOL BASIN, LA	MVN
205	LOCKPORT TO LA ROSE, LAFOURCHE PARISH, LA	MVN
205	PAILET BASIN, JEFFERSON PARISH, LA	MVN
205	PORTAGE CANAL DRAINAGE IMPROVEMENT, LA	MVN
205	ROSETHORNE BASIN, JEAN LAFITTE, LA	MVN
205	ST MARTIN PARISH, LA	MVN
205	TOWN OF CARENCRO, LAFAYETTE PARISH, LA	MVN
205	AITKIN, MN	MVP
205	CANISTEO MINE PIT LAKE, MN	MVP
205	CHIPPEWA RIVER AT MONTEVIDEO, MN	MVP
205	FARGO, RIDGEWOOD ADDITION, ND	MVP
205	JORDAN, MN	MVP
205	LAC QUI PARLE RIVER, DAWSON, MN	MVP
205	MARSH CREEK, MAHNOMEN COUNTY, MN	MVP
205	MINNESOTA RIVER, GRANITE FALLS, MN	MVP
205	NEWPORT, MN	MVP
205	ROCKFORD, MN	MVP
205	WAHPETON, ND	MVP
205	WILD RICE & MARSH RIVERS, ADA, MN	MVP
205	CLARK RUN CREEK, N. UTICAL, IL	MVR
205	EAST PEORIA, IL	MVR
205	INDIAN CREEK, CEDAR RVR, CEDAR RAPIDS, IA	MVR

CAP Section	CAP Project Name	District
205	IOWA CITY, IOWA RIVER, IA	MVR
205	MAD CREEK, MUSCATINE, IA	MVR
205	WINNEBAGO RVR, MASON CITY, IA	MVR
205	FESTUS AND CRYSTAL CITY	MVS
205	GOOSE CREEK, JACKSON, MO	MVS
205	HUBBLE CREEK, JACKSON, MO	MVS
205	MEREDOSIA, IL	MVS
205	MODOC L&D DIST PRAIRIE, IL BE101	MVS
205	MONROE COUNTY, IL	MVS
205	BENNETTS BRANCH, HUSTON TOWNSHIP, PA	NAB
205	BOROUGH LACKAWANNA COUNTY, PA	NAB
205	CEDAR RUN, PA	NAB
205	DOE RUN, PA	NAB
205	ELKTON, MD	NAB
205	HESHBON TO HEPBURNVILLE, LOWER LYCOMING CREEK	NAB
205	MONTOURSVILLE, LYCOMING COUNTY, PA	NAB
205	SUSQUEHANNA TOWNSHIP, PA	NAB
205	ABERJONA RIVER, WINCHESTER, MA	NAE
205	BLACK ROCKS CREEK, SALISBURY, MA	NAE
205	JEWETT BROOK, NH	NAE
205	MILLERS RIVER, ATHOL, MA	NAE
205	NORTH RIVER, PEABODY, MA	NAE
205	SALISBURY RIVER, MA	NAE
205	SALMON RIVER, HADDAM & EAST HADDAM, CT	NAE
205	STILL RIVER, DANBURY, CT	NAE
205	WEST RIVER, WOODBRIDGE, CT	NAE
205	BEPJ POPLAR BROOK	NAN
205	FULMER CREEK, VILLAGE OF MOHAWK, NY	NAN
205	JACKSON BROOK, MORRIS CITY, NJ	NAN
205	LONG HILL TOWNSHIP	NAN
205	LONG HOUSE CREEK, TOWN OF WARWICK, NY SECTION 205	NAN
205	MILL BROOK HIGHLAND PARK NJ	NAN
205	MOYER CREEK, VILLAGE OF FRANKFURT, NY	NAN
205	NORTHVALLE, SPARK HILL, NJ	NAN
205	STEELE CREEK, VILLAGE OF ILION, NY	NAN
205	TOWN OF WELLS, NY	NAN
205	AUGUSTA COUNTY, VA	NAO
205	CABIN CREEK, BATH COUNTY, VA	NAO
205	HAGUE, NORFOLK, VA	NAO
205	JAMESTOWN ISLAND, JAMES CITY COUNTY, VA	NAO
205	ROCKBRIDGE COUNTY, VA	NAO
205	TOWN OF VESUVIUS, ROCKBRIDGE COUNTY, VA	NAO
205	UPPER MAURY RIVER TRIBUTARIES, ROCKBRIDGE AND AUGUSTA COUNTIES, VA	NAO
205	WOODS CREEK-VMI, LEXINGTON, VA	NAO

CAP Section	CAP Project Name	District
205	BRISTOL TWP, BLACK DITCH CREEK, PA	NAP
205	BRISTOL TWP, MINOT AVE, PA	NAP
205	COOPER RIVER LAKE, NJ (CAP SEC 205)	NAP
205	FLOOD WATER ABATEMENT, PORT OF WILMINGTON, DE	NAP
205	HAMILTON TOWNSHIP, NJ	NAP
205	HANCOCK, DELAWARE COUNTY, NY	NAP
205	LITTLEMILL CR, NEW CASTLE CTY, DEBD625	NAP
205	MANATAWNY CREEK, POTTSTOWN, PA	NAP
205	PENNSVILLE, NJ	NAP
205	PENNSYLVANIA AVENUE IMPROVEMENT, BETHANY BEACH, DE	NAP
205	PHILADELPHIA SHIPYARD FLOOD REDUCTION, PHILADELPHIA, PA	NAP
205	PORT JERVIS, NY	NAP
205	STONY CREEK, NORRISTOWN, PA	NAP
205	TOOKANY CREEK, CHURCH ROAD, PA	NAP
205	TOOKANY CREEK, GLENSIDE ROAD, PA	NAP
205	UPPER DEL RVR WATERSHED FLD MITIGATION,NY (LIVINGSTON MANOR)	NAP
205	WALTON, DEL COUNTY, NY	NAP
205	BLACKSNAKE CREEK, ST. JOSEPH, MO	NWK
205	CONCORDIA, KS	NWK
205	CROSSCREEK, ROSSVILLE, KS	NWK
205	EUREKA CREEK, MANHATTAN, KS	NWK
205	BATTLE CREEK, NE	NWO
205	CLEAR CREEK N. OVERFLOW, CO	NWO
205	GARRISON ST. BRIDGE, ARVADA, CO	NWO
205	KNIFE RIVER, MERCER COUNTY, ND	NWO
205	LINTON (EMMONS COUNTY), ND	NWO
205	LIVINGSTON, MT	NWO
205	PLATTE RIVER, FREMONT, NE	NWO
205	PLATTE RIVER, SCHUYLER, NE	NWO
205	RANDOLPH, NE	NWO
205	WOODCLIFF SID, SAUNDERS COUNTY, NE	NWO
205	DAM BREAK EARLY WARNING SYSTEM, SILVERTON, OR	NWP
205	ROCK CREEK DREDGING (CAP), WA	NWP
205	GOOSE CREEK, WILBUR, WA	NWS
205	SKAGIT RIVER LA CONNOR , WA	NWS
205	SNOQUALMIE RIVER, WA (BESNQ)	NWS
205	STEHEKIN, CHELAN COUNTY, WA	NWS
205	STILLAGUAMISH VALLEY AT STANWOOD, WA	NWS
205	WHITE RIVER AT PACIFIC, WA	NWS
205	YAKIMA RIVER AT UNION GAP, WA	NWS
205	COPPEI CREEK, WA	NWW
205	FORT YUKON FLOOD CONTROL, FORT YUKON, AK	POA
205	SALCHA FLOOD DAMAGE REDUCTION, SALCHA, AK	POA
205	WHITTIER CREEK, AK	POA

CAP Section	CAP Project Name	District
205	KAPAAKEA STREAM, MOLOKAI, HI	POH
205	KEOPU-HIENALOLI STREAM, ISLAND OF HAWAII, HI	POH
205	KULIOUOU STREAM, OAHU, HI	POH
205	MOANALUA STREAM, OAHU, HI	POH
205	PALAI STREAM, HAWAII, HI	POH
205	WAIHOLE-WAIKANE VALLEY FLOOD DAMAGE REDUCTION, OAHU, HI	POH
205	WAIAKEA STREAM, HAWAII, HI	POH
205	WAILELE STREAM, OAHU, HI	POH
205	SCOTTS CREEK, SC	SAC
205	ARROYO, PR	SAJ
205	EST LA GRANGE ST CROIX	SAJ
205	ESTATE MON BIJOU, ST CROIX, VI	SAJ
205	RIO ANTON RUIZ-PUNTA SANTIAGO, PR BERAR	SAJ
205	RIO CIBUCO, VEGA BAJA, PR	SAJ
205	RIO CULEBRINAS-AG	SAJ
205	RIO DESCALABRADO	SAJ
205	RIO EL OJO DE AGUA PR BER	SAJ
205	RIO FAJARDO PR BERFJ	SAJ
205	RIO GRANDE DE JAYUYA, PR	SAJ
205	RIO GUAMANI-GUAYA	SAJ
205	RIO LOCO, GUANICA, PR	SAJ
205	RIO OROCOVIS, PR.	SAJ
205	RIO PATILLAS, PATILLAS, PR	SAJ
205	TURPENTINE RUN, ST THOMAS, VI BETRN	SAJ
205	BEN HILL COUNTY, GA	SAS
205	BYRUM CREEK, ANDERSON COUNTY, SC	SAS
205	MACON LEVEE, GA	SAS
205	BERNALILLO, NM	SPA
205	FLUME AT WILLOW CREEK, CREED, CO	SPA
205	HATCH, NM	SPA
205	HOBBS, NM	SPA
205	LITTLE PUERCO RV GALLUP NM BE709	SPA
205	OAK CREEK FLORENCE CO BE710	SPA
205	SUN VALLEY, EL PASO, TX	SPA
205	BATTLE MOUNTAIN, NV	SPK
205	COSGROVE CREEK FLOOD CONTROL, CALAVERAS COUNTY	SPK
205	GALINDO CREEK, CA	SPK
205	MAGPIE AND DON JULIO CREEKS, CA	SPK
205	NORTH SPANISH SPRINGS, NV	SPK
205	RENO FLOOD WARNING SYSTEM	SPK
205	RENO FLOOD WARNING SYSTEM, NV	SPK
205	TEHAMA, CA	SPK
205	BARREL SPRINGS WASH, CA	SPL
205	BEAVER DAM WARNING SYSTEM, AZ	SPL

CAP Section	CAP Project Name	District
205	BORREGO SPRINGS, CA	SPL
205	BURNT MOUNTAIN WASH, YUCCA VALLEY, CA	SPL
205	CITY OF WHITTIER, CA	SPL
205	EAGLE CANYON DAM, CA	SPL
205	HAVASUPAI FLOOD RISK MANAGEMENT, AZ	SPL
205	LITTLEROCK DAM, CA	SPL
205	PINTO COVE, CITY OF 29 PALMS, CA	SPL
205	POLACCA AIRPORT, AZ	SPL
205	POLACCA WASH, AZ (SECTION 14)	SPL
205	WATER CANYON, YUCCA VALLEY, CA (CAP SEC 205)	SPL
205	LAS GALLIANAS CRK, MARIN CO BE746	SPN
205	SAN PEDRO CREEK, PACIFICA, CA BE606	SPN
205	WHITE SLOUGH BE608	SPN
205	CIENEGAS CREEK, DEL RIO, TX	SWF
205	CITY OF EVERMAN, TX	SWF
205	FARMERS BRANCH, TARRANT COUNTY, TX	SWF
205	LEWIS CREEK, BULVERDE, TX	SWF
205	LITTLE BRAZOS RIVER, TX	SWF
205	LITTLE FOSSIL CREEK, HALTOM CITY, TX	SWF
205	MANY, LA	SWF
205	NEW BRAUNFELS, TX	SWF
205	PECAN CREEK, GAINESVILLE, TX	SWF
205	POST OAK CREEK, CORSICANA, TX	SWF
205	RIO GRANDE & UNNAMED TRIBUTARY, TX	SWF
205	ROBINSON, TX	SWF
205	TOWN BRANCH, CORSICANA, TX	SWF
205	ARCHEY FORK CREEK, CLINTON, AR	SWL
205	DYER, AR	SWL
205	HESTER, ADAMSON & HEARTSILL CREEKS, GREENWOOD, AR	SWL
205	HOWELL CREEK, WEST PLAINS, MO	SWL
205	OIL TROUGH, WHITE RIVER, AR	SWL
205	TUCKER CREEK LEVEE, AR	SWL
205	WALKER CREEK, MO	SWL
205	ADAMS CREEK, SMALL FLOOD CONTROL, WAGONER COUNTY, OK	SWT
205	COW CREEK, CRAWFORD COUNTY, KS	SWT
205	COWETA CREEK, SMALL FLOOD CONTROL, COWETA, OK	SWT
205	COWSKIN CREEK, WICHITA, KS	SWT
205	FISHER CREEK, SAND SPRINGS, OK	SWT
205	IOLA, KS	SWT
205	KINGFISHER, OK	SWT
205	LINE CREEK, CHICKASHA, OK	SWT
205	NEODESHA, KS	SWT
205	PALO DURO CREEK, CANYON, TX	SWT
205	SEDGEWICK, KS	SWT

CAP Section	CAP Project Name	District
205	SEDGEWICK, KS, LITTLE ARK RIVER WATERSHED	SWT
205	WATONGA, OK	SWT
205	WHITEWATER RIVER, AUGUSTA, KS	SWT
205	WILLOWWOOD ADDITION, EDMOND, OK	SWT
206	ARCOLA CREEK MADISON, OH	LRB
206	BRIGHTWOOD LAKE, CONCORD, NY	LRB
206	BUFFALO OUTER HARBOR, NY	LRB
206	CUYAHOGA RIVER STREAM PROJECT, AKRON, OH	LRB
206	DUGWAY CREEK, NY	LRB
206	JOHNSON POND, LYNDONVILLE, NY	LRB
206	LASALLE PARK, BUFFALO, NY	LRB
206	LITTLE CAYAHOGA RIVER, AKRON, OH	LRB
206	MENTOR MARSH, OH	LRB
206	ONTARIO STREET, BUFFALO, NY	LRB
206	SOUTH PARK LAKE	LRB
206	SYRACUSE LAKEFRONT, ONONDAGA, NY	LRB
206	BURNHAM PRAIRIE, IL	LRC
206	BUTLER LAKE, IL	LRC
206	CHICAGO BOTANICAL GARDENS, IL	LRC
206	EUGENE FIELD, IL	LRC
206	GOVERNOR'S STATE UNIVERSITY, IL	LRC
206	GRASS LAKE, FOX RIVER, IL	LRC
206	HOFFMAN DAM, IL	LRC
206	HORNER PARK, CHICAGO, IL	LRC
206	ILLINOIS AND MICHIGAN CANAL, IL	LRC
206	LOCKPORT PRAIRIE NATURE PRESERVE, WILL COUNTY	LRC
206	LONG LAKE, IN	LRC
206	MORTON ARBORETUM, IL	LRC
206	NIPPERSINK CREEK	LRC
206	NORTHSIDE PREP/VON STEUBEN, CHICAGO RIVER, CHICAGO, IL	LRC
206	ORLAND PARK, IL	LRC
206	PAUL DOUGLAS WOODS, SOUTH BARRINGTON, IL	LRC
206	PECK LAKE, GENEVA, IL	LRC
206	PING TOM PARK, IL	LRC
206	POPLAR CREEK, IL	LRC
206	SEQUOIT CREEK, IL	LRC
206	SPRING CREEK VALLEY, IL	LRC
206	SQAW CREEK, IL	LRC
206	WASHINGTON PARK, CHICAGO, IL	LRC
206	WINFIELD CREEK, WHEATON, IL	LRC
206	WOLF LAKE, IN	LRC
206	BELLE ISLE PIERS, DETROIT, MI	LRE
206	BRADLEY LAKE, STURGEON BAY, WI	LRE
206	CASS RIVER, CITY OF VASSAR, MI	LRE

CAP Section	CAP Project Name	District
206	CENTERVILLE CREEK, CLEVELAND, WI	LRE
206	CLEARWATER LAKE MILFOIL ABAT, MI	LRE
206	DETROIT RIVER, CITY OF TRENTON, MI	LRE
206	DOWAGIAC RIVER, CASSOPOLIS, MI	LRE
206	HIGGINS LAKE, ROSCOMMON COUNTY, MI	LRE
206	HOMER LAKE, ST JOSEPH RIVER	LRE
206	HOUGHTON LAKE, ROSCOMMON CO, MI	LRE
206	KINNICKINNIC RIVER, WI	LRE
206	KOONTZ LAKE, IN	LRE
206	LOWER MENOMONEE RIVER VALLEY, MILWAUKEE, WI	LRE
206	MARION MILL POND, VILLAGE OF MARION, OSCEOLA COUNTY, MI	LRE
206	MEMOMONEE, WI	LRE
206	OTSEGO LAKE, MI	LRE
206	PALMER/LONG LAKES, ST. JOSPEH COUNTY, MI	LRE
206	PIKE RIVER, MT PLEASANT, WI	LRE
206	SECORD AND SMALLWOOD LAKES, GLADWIN COUNTY, MI	LRE
206	SHAMROCK LAKE, CITY OF CLARE, MI	LRE
206	SPRING LAKE, MI	LRE
206	TICHIGAN LAKE, WATERFORD, WI	LRE
206	UNDERWOOD CREEK, WAUWATOSA, WI	LRE
206	WILSON PARK CREEK, WI	LRE
206	5TH AVE DAM REMOVAL, COLUMBUS, OH	LRH
206	CABIN CREEK, WV	LRH
206	HELLBRANCH, OH	LRH
206	WATAUGA, NC, AQUATIC RESTORATION	LRH
206	AQUATIC ECOSYSTEM REST, SOUTH FORK PATOKA RIVER, IN	LRL
206	AQUATIC ECOSYSTEM REST, STILLWATER RIVER, WEST MILON, OH	LRL
206	BEARGRASS CREEK LOUISVILLE KY WETLANDS	LRL
206	BEARGRASS CREEK, WESTLANDS, KY	LRL
206	BLOOMINGTON WETLAND DEVELOPMENT, IN	LRL
206	E FORK WHITE RIVER, COLUMBUS, IN	LRL
206	FREEMAN LAKE WILDLIFE REFUGE, KY	LRL
206	GOOSE POND/MIAMI OXBOW, KY	LRL
206	LEXINGTON ROAD PARK, GREENWAY, KY	LRL
206	LICKING RIVER DAM REMOVAL, KY	LRL
206	OHIO RIVER GARVIN BROWN PRESERVE, KY	LRL
206	OHIO RIVER, HAYS KENNEDY PARK, KY	LRL
206	PITCHER LAKE OXBOW RESTORATION, KY	LRL
206	BUNCOMBE COUNTY, NC	LRN
206	CENTERVILLE, TN	LRN
206	HIGHLANDS, LAKE SEQUOYAH, CULLASAJA RIVER, NC	LRN
206	JONESBOROUGH, TN	LRN
206	LOWER CUMBERLAND RIVER	LRN
206	MARYVILLE, TN	LRN

CAP Section	CAP Project Name	District
206	PIONEER PARK, COLUMBIA, TN	LRN
206	POWELL RIVER, ELY/PUCKETTS CREEK, VA	LRN
206	STRAIGHT, REEDS, JONES & COX CREEKS, VA	LRN
206	BUHL PARK LAKE, PA	LRP
206	CANONSBURG LAKE, PA	LRP
206	EAST PALESTINE, OHIO	LRP
206	FALLS RUN, WHEELING CREEK, BELMONT, OH	LRP
206	NINE MILE RUN, ALLEGHENY COUNTY, PA	LRP
206	NORTH PARK, ALLEGHENY COUNTY, PA	LRP
206	NORTH SHORE RIVERFRONT PARK, PITTSBURGH, PA	LRP
206	SHERADEN PARK & CHARTIERS CR, PA	LRP
206	BROWNSVILLE BRANCH, AR 206	MVM
206	KNIGHT CREEK, AR	MVM
206	PINEY CREEK, TN	MVM
206	BAYOU GROSSE TETE WATERSHED, IBERVILLE PARISH, LA	MVN
206	BURAS MARINA, PLAQUEMINES PARISH, LA	MVN
206	CITY PARK LAKES, NEW ORLEANS, LA	MVN
206	FALSE RIVER, POINTE COUPEE PARISH, LA	MVN
206	LAKE KILLARNEY, LA STATE PENITENTIARY, LA	MVN
206	LAKE VERRET, ASSUMPTION PARISH, LA	MVN
206	UNIVERSITY LAKES RESTORATION, EAST BATON ROUGE PARISH, LA	MVN
206	VERMILLION RIVER ECOSYSTEM RESTORATION	MVN
206	ZEMURRAY PARK ECOSYSTEM RESTORATION, TANGIPAHOA, LA	MVN
206	CHRISTINE AND HICKSON DAMS	MVP
206	DRAYTON DAM	MVP
206	GRAND MARAIS RIVER, RLWSD	MVP
206	HAY CREEK ROSEAU COUNTY MN	MVP
206	KINNICKINNIC RIVER, WI	MVP
206	LAKE ISABELLE, HASTINGS, MN	MVP
206	LAKE ISABELLE, MN	MVP
206	LAKE OF THE WOODS, MN	MVP
206	MINNEHAHA REACHES 19-21, MN	MVP
206	NORTH OTTOWA MN	MVP
206	PAINTERS CREEK, MN	MVP
206	PIGS EYE LAKE	MVP
206	PIGS EYE LAKE, MN	MVP
206	SUMPF LAKE, MN	MVP
206	YELLOW RIVER, IA	MVP
206	ZUMBRO RIVER DELTA, MN	MVP
206	CLEAR LAKE, IA	MVR
206	DUCK CREEK/FAIRMOUNT PARK WETLAND RESTOR SCOTT COUNTY, IA	MVR
206	EMIQUON FLOODPLAIN RESTORATION	MVR
206	FREEBORN COUNTY ECOSYSTEM RESTORATION, MN	MVR
206	HORICON MARSH, WI (SECTION 206)	MVR

CAP Section	CAP Project Name	District
206	IA RVR/CLEAR CREEK, JOHNSON COUNTY, IA	MVR
206	JACKSON FISH PASSAGE, MN	MVR
206	KANKAKEE, KANKAKEE COUNTY, IL	MVR
206	LAKE KOSHKONONG, WI	MVR
206	STORM LAKE, IA	MVR
206	WHITEBREAST WATERSHED, IA	MVR
206	WINDOM FISH PASSAGE, MN	MVR
206	ARNOLD, MO	MVS
206	BIG CREEK WATERSHED, IL	MVS
206	FOREST PARK, ST LOUIS, MO	MVS
206	HORSESHOE LAKE RESTORATION, IL	MVS
206	LAKE LOU YAEGER RESTORATION, IL	MVS
206	LAKE MAUVAISTERRE, JACKSONVILLE, IL	MVS
206	LEMAY WETLAND RESTORATION, MO	MVS
206	LOWER CACHE RIVER, IL (SECTION 206)	MVS
206	MERAMEC RIVER WETLANDS, ST. LOUIS COUNTY, MO	MVS
206	MIDWEST SOARRING, MACOUPIN COUNTY, IL	MVS
206	SHAD LAKE, MACOUPIN COUNTY, IL	MVS
206	ST. PETERS WETLANDS RESTORATION, MO	MVS
206	WATKINS CREEK, ST. LOUIS, MO	MVS
206	BRUBAKER RUN, PA	NAB
206	CODORUS CREEK, PA	NAB
206	DEEP RUN/TIBER HUDSON, MD	NAB
206	DENTS RUN, PA	NAB
206	DOG ISLAND SHOALS, MD	NAB
206	EATONBROOK RESERVOIR NY	NAB
206	FALL BROOK PA	NAB
206	FRANKLIN POINT PARK, ANNE ARUNDEL COUNTY, MD	NAB
206	GREENBURY POINT, MD	NAB
206	LOWER GWYNNNS FALLS, MD	NAB
206	LOYALSOCK CREEK, DUSHORE, PA	NAB
206	NANTICOKE CREEK, LUZERNE COUNTY, PA	NAB
206	NORTH BEACH MD	NAB
206	NORTHWEST BRANCH ANACOSTIA	NAB
206	PAINT BRANCH FISH PASSAGE, MD	NAB
206	PLEASURE ISLAND, BALTIMORE COUNTY, MD	NAB
206	POWDERLY CREEK PA	NAB
206	SANDY RUN, PA	NAB
206	SIX MILE RUN, PA	NAB
206	SWEET ARROW LAKE, PA	NAB
206	TIDAL MIDDLE BRANCH, MD	NAB
206	URIEVILLE LAKE, MD	NAB
206	WESTERN BRANCH, PATUXENT, MD	NAB
206	WRIGHT'S CREEK, MD	NAB

CAP Section	CAP Project Name	District
206	ASSABET RIVER, MA	NAE
206	BASS RIVER SALT MARSH RESTORATION, YARMOUTH, MA	NAE
206	BIRD ISLAND RESTORATION, MARION, MA	NAE
206	BRUSH NECK COVE, WARWICK, RI	NAE
206	BURRAGE PD, HANSON & HALIFAX, MA	NAE
206	CALF PASTURE (SEC206), N. KINGSTOWN, RI	NAE
206	HIX BRIDGE SALT MARSH RESTORATION, WESTPORT, MA	NAE
206	HOUGH'S NECK SALT MARSH, QUINCY, MA	NAE
206	LOWER BLACKSTONE RIVER, RI	NAE
206	MALDEN RIVER ECOSYSTEM, MA	NAE
206	MANHAN DAM, EASTHAMPTON, MA	NAE
206	MILFORD POND, MILFORD, MA	NAE
206	MILL POND RESTORATION, NASHUA, NH	NAE
206	MILL POND, LITTLETON, MA	NAE
206	MILL RIVER, STAMFORD, CT	NAE
206	NARROWS RIVER, NARRAGANSETT, RI	NAE
206	NASHAWANNUCK POND, EASTHAMPTON, MA	NAE
206	NEPONSET RIVER, BOSTON, MA	NAE
206	NEW MEADOWS RIVER, BATH, ME	NAE
206	NINIGRET & CROSS MILLS PONDS, CHARLESTOWN, RI	NAE
206	OSGOOD POND RESTORATION, MILFORD, NH	NAE
206	PLEASANT RIVER SALT MARSH RESTORATION, ADDISON, ME	NAE
206	QUONOCONTAUG POND, CHARLESTOWN, RI	NAE
206	RUN POND COASTAL EXOSYSTEM RESTORATION, MA	NAE
206	TEN MILE RIVER, RI	NAE
206	TREATS POND, COHASSET, MA	NAE
206	WINNAPAUG POND, WESTERLY, RI	NAE
206	WISWALL DAM, DURHAM, NH	NAE
206	ALLEY CREEK, QUEENS, NY	NAN
206	CROSSWAY FIELD, VILL OF SCARSDALE. NY	NAN
206	EDITH READ NATURAL PARK & WILDLIFE SANCTUARY IN	NAN
206	ESSEX COUNTY, WEEQUAHIC PARK, NJ	NAN
206	HACKENSACK MEADOWLANDS, NY	NAN
206	HBR ISL PART, MAMARONECK, NY	NAN
206	KINGS PARK, NY	NAN
206	KOWAWESE AREA RESTORATION, NEW WINDSOR, NY	NAN
206	LOWER HEMPSTEAD HARBOR, VILLAGE OF SEA CLIFF, NY	NAN
206	MANHASSET BAY, TOWN OF NORTH HEMPSTEAD, NY, ECOSYSTEM RESTOR	NAN
206	MILL POND, BAY SHORE, NY	NAN
206	MUD CREEK, GREAT SOUTH BAY, EAST PATHOUHUE, NY	NAN
206	NEW ROCHELLE,(ECHO BAY),NY	NAN
206	ORISKANY FLATS, NY	NAN
206	POTASH BROOK,NY	NAN
206	ROGERS POND, FRANKLIN TOWNSHIP, NJ	NAN

CAP Section	CAP Project Name	District
206	RYE, NY NURSERY WETLAND	NAN
206	SOUNDVIEW PARK,CITY OF BRONX,NY	NAN
206	SPRING CREEK, NY	NAN
206	SUNSET PARK, BUSH PIERS, BROOKLYN, NY	NAN
206	WEST BEACH, STOWE, VT	NAN
206	WEST SHORE OF PENATAQUIT CREEK, BAY SHORE, NY	NAN
206	WILD BRANCH RIVER, WOLCOTT, VT	NAN
206	BELLE ISLE STATE PARK, LANCASTER COUNTY, VA	NAO
206	CHIPPOKES STATE PARK, SURRY COUNTY, VA	NAO
206	COLLEGE LAKE, LYNCHBURG, VA	NAO
206	ELIZABETH RIVER, CAROLANNE FARMS, VIRGINIA BEACH, VA	NAO
206	ELIZABETH RIVER, GRANDY VILLAGE, NORFOLK, VA	NAO
206	ELIZABETH RIVER, JORDAN BRIDGE, PORTSMOUTH, VA	NAO
206	ELIZABETH RIVER, LANCELOT DRIVE, VIRGINIA BEACH, VA	NAO
206	ELIZABETH RIVER, ODU DRAINAGE CANAL, NORFOLK, VA	NAO
206	ELIZABETH RIVER, SCUFFLETOWN CREEK, CHESAPEAKE, VA	NAO
206	ELIZABETH RIVER, WOODSTOCK PARK, VIRGINIA BEACH, VA	NAO
206	HARVELL DAM, PETERSBURG, VA	NAO
206	JORDAN POINT DAM, LEXINGTON, VA	NAO
206	LAKE ANNA, LOUISA, ORANGE AND SPOTSYLVANIA COUNTIES, VA	NAO
206	SAXIS ISLAND, ACCOMACK COUNTY, VA	NAO
206	TANGIER ISLAND, ACCOMACK COUNTY, VA	NAO
206	YORK RIVER STATE PARK, JAMES CITY COUNTY, VA	NAO
206	BUTLER BROOK FISH PASSAGE RESTORATION, NY	NAP
206	CEMENTON DAM FISH PASSAGE, PA	NAP
206	DARBEE BROOK, VILLAGE OF LIBERTY, SULLIVAN COUNTY, NY	NAP
206	FOGELSVILLE DAM, LEHIGH COUNTY, PA	NAP
206	GROVER'S MILL POND, TWP OF WINDSOR, MERCER COUNTY,NJ	NAP
206	MAURICE RIVER FISH PASSAGE, NJ	NAP
206	MISPILLION INLET, SUSSEX COUNTY, DE	NAP
206	MUSCONETCONG RIVER DAM REMOVALS, NJ (SECTION 206)	NAP
206	RANOCAS CREEK, FISHWAYS, NJ	NAP
206	ROSCO, NY (FPMS STUDY)	NAP
206	SCHUYLKILL RIVER, BARTRAM, PA (SECTION 206)	NAP
206	SILVER LAKE, NY	NAP
206	SOUTH HAMPTON CREEK, ENVIRONMENTAL RESTORATION	NAP
206	CHARITON RIVER AND RATHBUN LAKE WATERSHED, IA	NWK
206	MISSOURI STREAM RESTORATION	NWK
206	WANAMAKER WETLANDS, KS	NWK
206	BOW TIE WETLANDS, CO	NWO
206	CARTERSVILLE DAM, MT	NWO
206	GLACIER CREEK, OMAHA, NE	NWO
206	GOOSE CREEK, CO	NWO
206	HERON HAVEN, NE	NWO

CAP Section	CAP Project Name	District
206	LOWER BOULDER CREEK, CO	NWO
206	ARROWHEAD CREEK AT WILSONVILLE, OR	NWP
206	BEAVER CREEK, OR	NWP
206	CAP SEC 206 KELLOGG CREEK, OR	NWP
206	COFFEE LAKE AT WILSONVILLE, OR	NWP
206	EUGENE DELTA PONDS, OR	NWP
206	HIGHWAY 47, VERNONIA, OR	NWP
206	JOHNSON CREEK/SPRINGWATER, OR	NWP
206	OAKS BOTTOM, OR	NWP
206	SPRGWATER JC GRESHAM, OR	NWP
206	SPRINGFIELD MILLRACE, OR	NWP
206	TILLAMOOK BAY, OR	NWP
206	WESTMORELAND PARK, OR	NWP
206	CARPENTER CREEK, WASHINGTON	NWS
206	ISSAQUAH CREEK, WA	NWS
206	NORTH SATUS DRAIN, YAKIMA, WA	NWS
206	NORTH STATUS DRAIN, WA	NWS
206	PORT OF SUNNYSIDE, WA	NWS
206	SOUTH FORK NOOKSACK RIVER WA	NWS
206	CAMP CREEK, ZUMWALT PRAIRIE PRESERVE, OR	NWW
206	LADD CANYON CULVERT REMOVAL, OR	NWW
206	PARADISE CREEK, CITY OF MOSCOW, ID	NWW
206	SALMON RIVER, CHALLIS, ID	NWW
206	TWIN FALLS, ID	NWW
206	BLACK LAKE ECOSYSTEM RESTORATION	POA
206	EKLUTNA, AK	POA
206	KLAWOCK, AK	POA
206	MATANUSKA, AK	POA
206	MENDENHALL, AK	POA
206	NORTHWAY, AK	POA
206	WHITTIER, AK	POA
206	MOKUHINIA/MOKUULA ECOSYSTEM RESTORATION, MAUI, HI	POH
206	SAIPAN LAGOON, CNMI	POH
206	CATFISH SWAMP, SC	SAC
206	COOPER RIVER RICE FIELDS, SC	SAC
206	POCOTALIGO RIVER AND SWAMP ECOSYSTEM RESTORATION, SC	SAC
206	AQUATIC ECOSYSTEM RESTORATION FOR ROSE BAY, VOLUISIA CO., FL	SAJ
206	BIG FISHWEIR CREEK, FL	SAJ
206	BOZUERON REFUGE, PR	SAJ
206	HOGAN'S CREEK	SAJ
206	STEVENSON CREEK, CLEARWATER, FL	SAJ
206	TURKEY CREEK, BREVARD COUNTY, FL	SAJ
206	ALLATOONA CREEK, COBB COUNTY, GA	SAM
206	ANNEEWAKEE CREEK, GA	SAM

CAP Section	CAP Project Name	District
206	BUTLER CREEK, GA	SAM
206	CHATTACHOOCHIE RIVER DAM REMOVAL, GA	SAM
206	CROOKED CREEK, GWINNETT, GA	SAM
206	CYPRESS CREEK, MONTGOMERY, AL	SAM
206	FLAT CREEK RESTORATION, GA	SAM
206	LITTLE RIVER WATERSHED, HALL COUNTY, GA	SAM
206	PROCTOR CREEK, COBB COUNTY, GA	SAM
206	SETTINGDOWN CREEK WATERSHED, FORSYTH COUNTY, GA	SAM
206	SHOAL CREEK, GA	SAM
206	ALLEN CREEK, HALL COUNTY, GA	SAS
206	BEAVER RUIN CREEK, GWINETT CO, GA	SAS
206	CABIN CREEK SPALDING CNTY, GA	SAS
206	JACKSON CREEK, GWINETT CO., GA	SAS
206	SOUTH NEWPORT RIVER, GA	SAS
206	CONCORD STREAMS RESTORTION, CONCORD, NC	SAW
206	GUM THICKET CREEK, NC	SAW
206	NC OYSTER RESTORATION, NC	SAW
206	WESTERN CARY STREAMS RESTORATION, CARY, NC	SAW
206	WILSON BAY RESTORATION, JACKSONVILLE, NC	SAW
206	ARKANSAS RIVER FISHERIES HABITAT RESTORATION, PUEBLO, CO	SPA
206	ARKANSAS RIVER TAMARISK ERADICATION, CO	SPA
206	BLUE HOLE LAKE, NM	SPA
206	BOTTOMLESS LAKE STATE PARK, NM	SPA
206	EL PASO RIO BOSQUE WETLANDS, TX	SPA
206	JAMES WALLACE MEMORIAL DAM NM	SPA
206	KEYSTONE WETLAND RESTORATION, TX	SPA
206	LAS CRUCES WETLAND RESTORATION	SPA
206	TAMARISK ERADICATION, CO	SPA
206	VALLEY CREEK PARK WETLAND RESTORATION, EL PASO, TX	SPA
206	VALLEY CREEK RESTORATION, TX	SPA
206	BLUE RIVER, CO	SPK
206	CITY CREEK, UT	SPK
206	GREEN RIVER, UT	SPK
206	INCLINE & 3RD CREEKS, NV	SPK
206	LAKE NATOMA, CA	SPK
206	LOWER TRUCKEE RIVER PAIUTE	SPK
206	NORTH FORK GUNNISON, CO (206)	SPK
206	PACIFIC FLYWAY CA	SPK
206	TAMARISK ERADICATION, CO	SPK
206	TURTLE BAY, CA	SPK
206	UPPER JORDAN RIVER, UT	SPK
206	WEBER RIVER, UT	SPK
206	WEST JORDAN RIVER, UT	SPK
206	WHITE SLOUGH WATER POLLUTION CONTROL FACILITY, CA	SPK

CAP Section	CAP Project Name	District
206	CANOA RANCH, AQUATIC RESTORATION, AZ	SPL
206	ENGLISH CREEK	SPL
206	LITTLE ROCK DAM, CA	SPL
206	RINCON CREEK, CA	SPL
206	SYCAMORE CREEK, SANTEE, CA	SPL
206	ARROYO LAS POSITAS, CA	SPN
206	ARROYO MOCHO, CA	SPN
206	COLERA CREEK, CA	SPN
206	MCINNIS PARK RESTORATION, CA	SPN
206	SALT RIVER RESTORATION, CA	SPN
206	ST. HELEN-NAPA RIVER RESTORATION	SPN
206	SULPHUR CREEK RESTORATION, CA	SPN
206	THOMPSON CREEK RESTORATION	SPN
206	UPPER YORK CREEK DAM REMOVAL, CA	SPN
206	ATASCOSA RIVER PLEASANTON, TX	SWF
206	CONCHO RIVER, UPPER COLORADO RIVER BASIN, TX	SWF
206	LAKE AUSTIN / TOWN LAKE, AUSTIN, TX	SWF
206	LAKE CYPRESS SPRINGS, FRANKLIN COUNTY, TX	SWF
206	LOWER WHITE ROCK CREEK, DALLAS, TX	SWF
206	OLMOS CREEK RESTORATION, SAN ANTONIO, TX	SWF
206	RED OAK CREEK TRIBUTARY, RED OAK, TX	SWF
206	RIO GRANDE ECOSYSTEM RESTORATION, LAREDO, TX	SWF
206	SAN MARCOS RIVER, SAN MARCOS, TX	SWF
206	SPRING LAKE, SAN MARCOS, TX	SWF
206	TOLEDO BEND RESERVOIR, TX & LA	SWF
206	WALNUT BRANCH, SEGUIN, TX	SWF
206	WWTP, MERIDIAN, TX	SWF
206	WWTP, STEPHENVILLE, TX	SWF
206	GALVESTON BAY RSM, TX	SWG
206	GIWWW-MAD ISLAND MARSH TX	SWG
206	KEITH LAKE FISH PASS, JEFFERSON COUNTY, TX	SWG
206	MOSES LAKE, TX	SWG
206	TAYLORS BAYOU, PORT ARTHUR TX	SWG
206	FOURCHE CREEK, HINDMAN PARK, LITTLE ROCK, AR	SWL
206	LITTLE BLACK DITCH, RIPLEY COUNTY, MO	SWL
206	SHIREY BAY/RAINEY BRAKE WMA	SWL
206	ARKANSAS RIVER, ARK CITY, KS	SWT
206	CROW CREEK AQUATIC ECOSYS RESTORATION, TULSA, OK	SWT
206	GRAND (NEOSHO) RIVER ABOVE MIAMI, OK	SWT
206	LAKE CARL BLACKWELL, OK	SWT
206	MINERAL BAYOU	SWT
208	AUGLAIZE RIVER, OH	LRB
208	DEER CREEK, WEBSTER COUNTY, KY	LRL
208	CAMP BAYOU CANAL, MOREHOUSE PARISH, LA	MVK

CAP Section	CAP Project Name	District
208	ORAN, MO	MVM
208	SNAGGING AND CLEARING OF UPPER BAYOU BOEUF, RAPIDES PH, LA	MVN
208	SWCD FLOOD REDUCTION (CAP), OR	NWP
208	BLACKWELL LAKE, BLACKWELL, OK	SWT
1135	CONNEAUT HARBOR EAST STATE PARK, OH	LRB
1135	EAST HARBOR STATE PARK, OH	LRB
1135	GULL POINT, PRESQUE ISLE, PA	LRB
1135	SCAJAQUADA CREEK, BUFFALO, NY	LRB
1135	SHELDON'S MARSH, LAKE ERIE, OH	LRB
1135	SMOKES CREEK, ERIE COUNTY, NY	LRB
1135	INDIAN RIDGE MARSH, CHICAGO, IL	LRC
1135	AUGRES RIVER, ARENAC COUNTY, MI	LRE
1135	BLACK MALLARD CREEK, PRESQUE ISLE COUNTY, MI	LRE
1135	FLINT FIVER & SWARTZ CREEK, FLINT, MI	LRE
1135	HARLOW CREEK, MARQUETTE COUNTY, MI	LRE
1135	KALAMAZOO RIVER, BATTLE CREEK, MI	LRE
1135	KID'S CREEK, BOARDMAN RIVER, MI	LRE
1135	LAKE POYGAN, WI	LRE
1135	LOWER ROUGE, ROTUNDA DR. AND I-94, MI	LRE
1135	ROUGE RIVER OXBOW, WAYNE COUNTY, MI	LRE
1135	SCHMIDT CREEK, PRESQUE ISLE COUNTY, MI	LRE
1135	SEA LAMPREY BARRIER, MANISTIQUE, MI	LRE
1135	SUCKER RIVER, ALGER COUNTY, MI	LRE
1135	TRAIL CREEK, LAPORTE COUNTY, IN	LRE
1135	UPPER ROUGE, MICHIGAN AVE. TO ROTUNDA DR., MI	LRE
1135	VILLAGE OF ESTRAL BEACH, MI	LRE
1135	DILLON LAKE, OH	LRH
1135	TAPPAN LAKE, OH	LRH
1135	WILLS CREEK, MASON MINE 280, OH	LRH
1135	ENVIRONMENTAL IMPROVEMENT, BEE SLOUGH EVANSVILLE, IN	LRL
1135	GREEN RIVER DAM, MOD, KY	LRL
1135	HOVEY LAKE HABITAT DEVELOPMENT, KY	LRL
1135	HOVEY LAKE WILDLIFE AREA, TN	LRL
1135	MONROE LAKE, MOIST SOIL UNITS, IN	LRL
1135	WETLANDS, SALAMONIE LAKE, IN	LRL
1135	J. PERCY PRIEST, STONES RIVER, TN	LRN
1135	ALLEG RIVER POOL 2-3 ENVIRONMENTAL RESTORATION, PA	LRP
1135	BAYOU DESIARD, MONROE, LA	MVK
1135	BAYOU MACON, LAKE VILLAGE, AR	MVK
1135	BOEUF RIVER, POINT JEFFERSON, LA	MVK
1135	CANNON BRAKE/LOWER VALLIER, ARK & JEFFERSON COUNTIES, AR	MVK
1135	DUMP LAKE, MS	MVK
1135	FRAZIER/WHITEHORSE OXBOW LAKE WEIR, LA	MVK
1135	LAKE GEORGE RESTORATION, YAZOO COUNTY, MS	MVK

CAP Section	CAP Project Name	District
1135	LAKE ST. JOSEPH, TENSAS PARISH, LA	MVK
1135	LAKE YAZOO, MS	MVK
1135	OUACHITA RIVER, CAMDEN RIVER WALK, CAMDEN, AR	MVK
1135	STEEP BANK CREEK, FELSENTHAL, AR	MVK
1135	SULPHUR RIVER WILDLIFE MANAGEMENT AREA, AR	MVK
1135	TCHULA LAKE, MS	MVK
1135	UPPER DEER CREEK, MS DELTA, MS	MVK
1135	LOWER CACHE RIVER, AR 1135	MVM
1135	LOWER OBION RIVER & VICINITY, DYER COUNTY, TN	MVM
1135	MOUND CITY, LOWER CACHE, IL	MVM
1135	GULF INTRACOASTAL WATERWAY, PLAQUEMINES LOCK LABE 690, LA	MVN
1135	HNC MILE 12-31.4 RESTORATION, TERREBONNE PARISH, LA	MVN
1135	LAKE FAUSSE POINT ECOSYSTEM RESTORATION, ST. MARY PARISH, LA	MVN
1135	MORGANZA FORE-BAY RESTORATION, LA	MVN
1135	BATTLE ISLAND, WI	MVP
1135	RUFFY BROOK & CLEARWATER RIVER	MVP
1135	SAND HILL RIVER	MVP
1135	EAST ST LOUIS RIVERFRONT, IL	MVS
1135	REND CITY WETLANDS RESTORATION, IL	MVS
1135	SHELBYVILLE WILDLIFE MANAGEMENT AREA RESTORATION, IL	MVS
1135	SPUNKY BOTTOMS RESTORATION, BROWN COUNTY, IL	MVS
1135	HART-MILLER ISLAND, MD	NAB
1135	LOWER KINGMAN ISLAND	NAB
1135	ROOSTER ISLAND, MD	NAB
1135	WHITNEY POINT LAKE, NY	NAB
1135	ALLIN'S COVE, BARRINGTON, RI	NAE
1135	BROAD MEADOWS MARSH RESTORATION, MA	NAE
1135	HALF-MOON COVE, PERRY, ME	NAE
1135	LONG POINT DIKE, PROVINCETOWN, MA	NAE
1135	MILL RIVER, NORTHHAMPTON, MA	NAE
1135	NMLC, BUZZARDS BAY, MA	NAE
1135	NORTH NASHUA RIVER, FITCHBURG, MA	NAE
1135	SMELT BROOK, BRAINTREE, MA	NAE
1135	WELLS SALT MARSH, WELLS, ME	NAE
1135	GERRITSEN CREEK, NY	NAN
1135	HOOSIC RIVER, TOWN OF ADAMS, MA	NAN
1135	LAKE CHAMPLAIN SEA LAMPREY BARRIERS	NAN
1135	LAKE CHAMPLAIN VT	NAN
1135	LINCOLN PARK WEST, JERSEY CITY, NJ	NAN
1135	NORTHPORT HARBOR, TOWN OF HUNTINGTON, NY	NAN
1135	RAHWAY RIVER ENVIRONMENTAL RESOTRATION NJ	NAN
1135	SPRING CREEK, NY	NAN
1135	VILLAGE OF OYSTER, NORTHAMPTON COUNTY, VA	NAO
1135	ASSUNPINK CREEK NJ	NAP

CAP Section	CAP Project Name	District
1135	DELAWARE BAY OYSTER RES, NJ	NAP
1135	FAIRMOUNT DAM, PA	NAP
1135	HABITAT PRODUCTIVITY OF DELAWARE BAY, DE	NAP
1135	MASON POINT DIKE WETLAND RESTORATION, NJ	NAP
1135	MORDECAI ISLAND RESOTRATION, NJ	NAP
1135	PETER CREEK LAKE RESTORATION, NJ	NAP
1135	PINE MOUNT CREEK	NAP
1135	POND CREEK NJ	NAP
1135	RESTORATION OF GRASS DALE DE	NAP
1135	BLUE VALLEY WETLANDS, JACKSON COUNTY, MO	NWK
1135	HARLAN SALT CEDAR ERADICATION	NWK
1135	KANSAS CITY RIVERFRONT, MO	NWK
1135	RATHBUN LAKE HABITAT RESTORATION PROJECT, IA	NWK
1135	SMITHVILLE AQUATIC PLANTINGS	NWK
1135	WOOD DUCK MARSH, IA	NWK
1135	PRISON FARM SHORELINE HABITAT, ND	NWO
1135	UPPER CENTRAL PLATTE VALLEY, COLFAX REACH	NWO
1135	DAIRY CREEK, OR	NWP
1135	FOX CREEK, OR	NWP
1135	LOWER COLUMBIA SLOUGH,OR	NWP
1135	STEIGERWALD LAKE, WA	NWP
1135	SW WASHINGTON STREAMS, WA	NWP
1135	CLARK FORK DELTA RESTORATION, MT (SECTION 1135)	NWS
1135	MAPES CREEK, WA	NWS
1135	SEC 1135 BRAIDED REACH	NWS
1135	SHORTY'S ISLAND, ID	NWS
1135	TURNING BASIN #3, DUWAMISH R, WA	NWS
1135	UNION SLOUGH, WA	NWS
1135	WYNOOCHEE ANADROMOUS FISH PASS, WA	NWS
1135	YAKIMA RIVER AT UNION GAP, WA	NWS
1135	BENNINGTON LAKE DIVERSION DAM, WA	NWW
1135	BOISE RIVER AT EAGLE ISLAND, ID	NWW
1135	CLOVER ISLAND, WA	NWW
1135	PORTNEUF RIVER, POCATELLO, ID	NWW
1135	TWO RIVERS, BENTON COUNTY, WA	NWW
1135	WALLA WALLA RIVER SECTION 1135, OR	NWW
1135	CORDOVA HARBOR, AK	POA
1135	KANAHA POND WILDLIFE SANCTUARY RESTORATION, MAUI, HI	POH
1135	KAUNAKAKAI STREAM ENVIRONMENTAL RESTORATION, MOLOKAI, HI	POH
1135	KAWAINUI MARSH ENVIRONMENTAL RESTORATION, OAHU, HI	POH
1135	PELEKANE BAY ECOSYSTEM RESTORATION, HAWAII, HI	POH
1135	C-102/103 RESTORATION, DADE COUNTY, FL	SAJ
1135	C-7 MIAMI-DADE, FL	SAJ
1135	C-8 MIAMI-DADE, FL	SAJ

CAP Section	CAP Project Name	District
1135	C-9, MIAMI-DADE, FL	SAJ
1135	CALOOSAHATCHEE OXBOWS RESTORATION, LEE COUNTY	SAJ
1135	LAKE JESSUP	SAJ
1135	RESTORE LA ESPERANZA PENIN,PR BGRLE	SAJ
1135	SARASOTA BAY RESTORATION, SARASOTA CO., FL	SAJ
1135	VIRGINIA BEACH KEY, FL (SEC. 1135)	SAJ
1135	ACADEMY CREEK, GLYNN COUNTY, GA	SAS
1135	LATHAM RIVER, GA	SAS
1135	MACON LEVEE, GA (SECTION 1135)	SAS
1135	ROSCOE CUT, MACINTOSH COUNTY, GA	SAS
1135	BELHAVEN HARBOR ENVIRONMENTAL IMPROVEMENTS, BELHAVEN, NC	SAW
1135	AQUATIC HABITAT RESTORATION @ PUBLO OF SANTA ANA, NM	SPA
1135	CIUDAD, RIO GRANDE, NM	SPA
1135	EAST RIO ARRIBA, RIO GRANDE, NM	SPA
1135	ECOSYSTEM REVITALIZATION @ ROUTE 66	SPA
1135	LAS CRUCES DAM ENVIRONMENTAL RESTORATION, DONA ANA COUNTY NM	SPA
1135	NEW MEXICO ENVIRONMENTAL INFRASTRUCTURE PROGRAM	SPA
1135	RIPARIAN/WETLAND REST., PUEBLO OF SANTA ANA RESERVATION, NM	SPA
1135	SANTA FE, POJOAQUE, RIO GRANDE, NM	SPA
1135	SOCORRO COUNTY FLOODPLAIN, NM	SPA
1135	ASHLEY CREEK, UT	SPK
1135	CHEROKEE CANAL, CA	SPK
1135	MURPHY SLOUGH, CA	SPK
1135	PUTAH CREEK SOUTH FORK PRESERVE, CA	SPK
1135	STEAMBOAT CREEK, NV	SPK
1135	WOODSON BRIDGE, CA	SPK
1135	AGUA FRIA RIPARIAN, AZ	SPL
1135	BALLONA CREEK JETTY, CA	SPL
1135	ENCINO CHANNEL, CA (SECTION 1135)	SPL
1135	RIVER CHANNEL, CA (SECTION 1135)	SPL
1135	TUJUNGA WASH ENVIRONMENTAL RESTORATION, CA	SPL
1135	WOODLEY CHANNEL, CA (SECTION 1135)	SPL
1135	ALAMEDA CREEK, CA	SPN
1135	BOTHIN SLOUGH, CA	SPN
1135	PINOLE CREEK RESTORATION, CA	SPN
1135	WILDCAT CREEK RESTORATION, CA	SPN
1135	BIG CYPRESS BAYOU FISH AND WILDLIFE HABITAT RESTORATION, TX	SWF
1135	EAGLELAND HABITAT RESTORATION, SAN ANTONIO, TX	SWF
1135	LEWISVILLE LAKE, FRISCO, TX	SWF
1135	O.C. FISHER LAKE ECOSYSTEM RESTORATION, TX	SWF
1135	OLD TRINITY RIVER CHANNEL WILDLIFE RESTORATION	SWF
1135	KEITH LAKE FISH PASS, JEFFERSON COUNTY, TX	SWG
1135	TAYLORS BAYOU, PORT ARTHUR TX	SWG
1135	MILLWOOD, GRASSY LAKE, AR, SECTION 1135	SWL

CAP Section	CAP Project Name	District
1135	ROCK CREEK & BOYLE PARK, LITTLE ROCK, AR	SWL
1135	BIG LAKE ECOSYSTEM RESTORATION	SWT
1135	GARDEN CITY ECOSYSTEM, KS	SWT
1135	JOE CREEK HABITAT RESTORATION, TULSA, OK	SWT
1135	SAND CREEK, NEWTON, KS	SWT

**Table M-1: Mississippi River and Tributaries, Base Plan Scenario
(\$ Thousands)**

Project	ST	Fiscal Year				
		2010	2011	2012	2013	2014
INVESTIGATIONS						
Surveys and Collection and Study of Basic Data						
MEMPHIS METRO AREA, STORM WATER MGMT STUDY, TN	TN	100	100	100	100	100
COLLECTION AND STUDY OF BASIC DATA	TN	215	215	215	215	215
DONALDSONVILLE TO THE GULF, LA	LA	400	0	0	0	0
ALEXANDRIA TO THE GULF, LA	LA	1,000	0	0	0	0
COLLECTION AND STUDY OF BASIC DATA	LA	115	0	0	0	0
COLDWATER RIVER BASIN BELOW ARKABUTLA LAKE, MS	MS	84	0	0	0	0
COLLECTION AND STUDY OF BASIC DATA	MS	170	170	170	170	170
Subtotal Investigations		2,084	485	485	485	485
Additional Studies and PEDs		0	1,633	1,646	1,680	1,765
Total Investigations		2,084	2,118	2,131	2,165	2,250
CONSTRUCTION						
MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO & TN	MO	4,421	4,492	4,522	4,593	4,773
CHANNEL IMPROVEMENT, DIKES, AR, IL, KY, LA, MS, MO & TN	TN	6,200	6,300	6,341	6,442	6,693
CHANNEL IMPROVEMENT, REVETMENT OPERATIONS, AR, IL, KY, LA, MS, MO & TN	TN	5,920	6,015	6,055	6,151	6,391
ATCHAFALAYA BASIN, LA	LA	5,834	5,928	5,967	6,062	6,298
MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO & TN	AR	5,000	5,081	5,114	5,195	5,398
MISSISSIPPI DELTA REGION, LA	LA	2,250	0	0	0	0
CHANNEL IMPROVEMENT, REVETMENT OPERATIONS, AR, IL, KY, LA, MS, MO & TN	LA	10,601	10,772	10,842	11,014	11,445
ATCHAFALAYA BASIN, FLOODWAY SYSTEM, LA	LA	2,664	2,707	2,725	2,768	2,876
MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO & TN	MS	19,453	19,767	19,896	20,212	21,001
CHANNEL IMPROVEMENT, DIKES, AR, IL, KY, LA, MS, MO & TN	MS	8,400	8,535	8,591	8,728	9,069
CHANNEL IMPROVEMENT, REVETMENT OPERATIONS, AR, IL, KY, LA, MS, MO & TN	MS	16,600	19,154	19,279	19,585	20,350
Total Construction		87,343	88,752	89,331	90,749	94,294
Total Maintenance (Project Specific Listing Omitted)		158,573	161,131	162,183	164,757	171,193
Total - Mississippi River and Tributaries (MR&T) Account		248,000	252,000	252,000	256,000	266,000

**Table M-2: Mississippi River and Tributaries, Enhanced Plan Scenario
(\$ Thousands)**

Project	ST	Fiscal Year				
		2010	2011	2012	2013	2014
INVESTIGATIONS						
Surveys and Collection and Study of Basic Data						
MEMPHIS METRO AREA, STORM WATER MGMT STUDY, TN	TN	100	300	280	204	
COLLECTION AND STUDY OF BASIC DATA	TN	215	215	215	215	250
DONALDSONVILLE TO THE GULF, LA	LA	400				
ALEXANDRIA TO THE GULF, LA	LA	1,000				
COLLECTION AND STUDY OF BASIC DATA	LA	115				
COLDWATER RIVER BASIN BELOW ARKABUTLA LAKE, MS	MS	84				
COLLECTION AND STUDY OF BASIC DATA	MS	170	400	400	400	400
Subtotal Investigations		2,084	915	895	819	650
Additional Studies and PEDs		0	1,228	1,307	1,450	1,703
Total Investigations		2,084	2,143	2,202	2,269	2,353
CONSTRUCTION						
MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO & TN	MO	4,421	4,546	4,671	4,813	4,991
CHANNEL IMPROVEMENT, DIKES, AR, IL, KY, LA, MS, MO & TN	TN	6,200	6,375	6,550	6,750	7,000
CHANNEL IMPROVEMENT, REVETMENT OPERATIONS, AR, IL, KY, LA, MS, MO & TN	TN	5,920	6,087	6,254	6,445	6,684
ATCHAFALAYA BASIN, LA	LA	5,834	5,999	6,163	6,352	6,587
MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO & TN	AR	5,000	5,141	5,282	5,444	5,645
MISSISSIPPI DELTA REGION, LA	LA	2,250	0	0	0	0
CHANNEL IMPROVEMENT, REVETMENT OPERATIONS, AR, IL, KY, LA, MS, MO & TN	LA	10,601	10,900	11,199	11,541	11,969
ATCHAFALAYA BASIN, FLOODWAY SYSTEM, LA	LA	2,664	2,739	2,814	2,900	3,008
MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO & TN	MS	19,453	20,002	20,551	21,179	21,963
CHANNEL IMPROVEMENT, DIKES, AR, IL, KY, LA, MS, MO & TN	MS	8,400	8,637	8,874	9,145	9,484
CHANNEL IMPROVEMENT, REVETMENT OPERATIONS, AR, IL, KY, LA, MS, MO & TN	MS	16,600	17,069	17,537	18,073	18,742
Total Construction		87,343	87,495	89,897	92,642	96,073
Total Maintenance (Project Specific Listing Omitted)		158,573	163,049	169,902	175,090	181,574
Total - Mississippi River and Tributaries (MR&T) Account		248,000	255,000	262,000	270,000	280,000