

FISCAL YEAR 2010

BUREAU OF RECLAMATION

ECOSYSTEM RESTORATION PROGRAM

Suisun Marsh Protection

Authority: P.L. 99-546, 100 Stat. 3052, October 27, 1986

FY 2010 Budget Request (000's): \$1,540

Project Description: The Suisun Marsh Preservation Agreement (SMPA) was executed on March 2, 1987, among Reclamation, California Department of Water Resources, California Department of Fish and Game, and Suisun Resource Conservation District. The revised SMPA was executed on June 20, 2005, to reflect significant events and changed conditions that had occurred since the original SMPA was signed. The objective of the SMPA is to assure that a dependable water supply is maintained to mitigate the adverse effects on the Marsh from the Central Valley Project (CVP) and State Water Project (SWP) and a portion of the adverse effects of the other upstream diversions. Reclamation (CVP) is responsible for 40 percent of the construction and annual operation and maintenance costs associated with implementation of the SMPA; the State of California (SWP) is responsible for 60 percent of the implementation costs.

Current Status: The SMPA agencies propose to amend the Revised SMPA to establish a Preservation Agreement Improvement Fund, which would fund cost sharing for improvement of managed wetland facilities and fund activities currently funded under the Joint Use Facilities Fund under a single cost sharing mechanism.

The managed wetland facilities improvement element of the proposed fund would include a 75/25 cost share program that would provide funds for infrastructure improvements necessary to meet the 30-day flood and drain cycle described in individual management plans, potentially including purchase and installation of new, larger, lowered, or relocated discharge facilities.

The managed wetland facilities improvement element of the proposed fund would also include a 50/50 cost share program which would provide funds for management and infrastructure improvements that are necessary to meet the recommendations described in the individual management plans to improve leaching and drainage efficiency. Eligible activities would include cleaning, widening and deepening primary and secondary ditches, adding v-ditches or drainage swales, raising elevations of pond bottom sinks, installation or improvement of interior water control structures, coring of interior levees, offsetting electrical and fuel costs for portable and stationary pumps during spring leaching periods only, and fish screen electrical costs.

The Joint Use Facility Improvements element of the proposed fund would provide funds on a 75/25 cost share basis for infrastructure improvement to increase efficient and cooperative use of joint use water delivery systems to managed wetlands, including construction of or improvements to: interior levees, water conveyance ditches, water control structures, and permanent pumps. Funded activities include newly constructed facilities or improvements to existing facilities.

Reclamation is also a principal participant with the other SMPA signatories and other interested agencies in developing a regional plan that balances implementation of the CALFED Program, SMPA and other management and restoration programs within Suisun Marsh in a manner responsive to the concerns of stakeholders and based upon voluntary participation by private landowners. Reclamation is currently participating in development of a draft Programmatic Environmental Impact Statement/Environmental Impact Report (PEIS/EIR) for the Suisun Marsh Plan, which will include environmental compliance documentation for implementation of the proposed amendment to the Revised SMPA. A public draft of the PEIS/EIR is anticipated in 2009, and the proposed amendment to the revised SMPA would be implemented following completion of the PEIS/EIR and related decision documents, which is currently anticipated in 2010.

Proposed Actions for FY 2010: Funding continues Federal participation with the State of California to identify structural and nonstructural actions for protection and preservation of Suisun Marsh to improve water quality, while preserving the CVP storage yield. Funding continues Reclamation participation with California Department of Water Resources to ensure dependable water supply of adequate quantity and quality to protect wildlife habitat in the Marsh for the protection and preservation of fish and wildlife, including the anticipated implementation of the previously described proposed amendment to the revised SMPA upon finalization of the Suisun Marsh Plan PEIS/EIR.

Anadromous Fish Restoration Program

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(1)

FY 2010 Budget Request (000's): \$4,190

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$250
U.S. Fish and Wildlife Service	\$3,940

Project Description: The objectives of the Anadromous Fish Restoration Program are to (1) improve habitat for all life stages of anadromous fish through provision of flows of suitable quality, quantity, timing, and physical habitat; (2) improve survival rates by reducing or eliminating entrainment of juveniles at diversions; (3) improve the opportunity for adult fish to reach their spawning habitats in a timely manner; (4) collect fish population, health, and habitat data to facilitate evaluation of restoration actions; (5) integrate habitat restoration efforts with harvest and hatchery management; and (6) involve partners in the implementation and evaluation of restoration actions.

Current Status: In FY2009, the AFRP will continue to fund habitat restoration projects that improve habitat, survival, and passage of anadromous fish in Antelope Creek, Cottonwood Creek, and the Calaveras, Cosumnes, Merced, Mokelumne, Stanislaus, and Tuolumne rivers. The program will continue to collect fish population data for Bear, Cottonwood, and Cow creeks and in the Stanislaus and Yuba rivers to facilitate evaluation of restoration actions.

The AFRP has addressed 30% of the actions and evaluations in the Final Restoration Plan since the program was implemented and the average natural production of Central Valley-wide Chinook salmon in the doubling period (1992-2007) is currently 477,337. The Chinook salmon natural production average has been decreasing in the last couple of years due to low adult escapement estimates in 2006 and 2007 resulting from poor ocean returns.

Proposed Actions for FY 2010: The AFRP will continue to make reasonable efforts to at least double natural production of anadromous fish. AFRP will work with local watershed groups and other local partners to implement locally developed and supported watershed restoration plans, and to give first priority to actions, which protect and restore natural channel and riparian habitat values. The AFRP will focus on streams with the greatest potential to sustain natural production of fall-run, winter-run, and, spring-run Chinook salmon, and steelhead. The streams that support these species include the Sacramento, Yuba, Feather, American, and Stanislaus rivers, and Cottonwood, Cow, Mill, Deer, Battle, and Clear creeks. Emphasis will be on improving access for spawning adults to upstream habitat, protecting and restoring riparian and shaded riverine aquatic habitat, improving access for juvenile fish to floodplain habitats, and reducing loss of juveniles along their rearing and migratory corridors. Furthermore, AFRP will collaborate and provide technical assistance to large-scale restoration efforts on the main-stem San Joaquin River and in the Delta.

Other CVP Impacts – Habitat Restoration Program 3406 (b)(1) Other

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(1) Other

FY 2010 Budget Request (000's): \$1,368

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$684
U.S. Fish and Wildlife Service	\$684

Project Description: Protect and restore native habitats impacted by the Central Valley Project (CVP) that are not specifically addressed in the Fish and Wildlife Restoration activities section of the CVPIA. The focus is on habitats known to have experienced the greatest percentage decline in habitat quantity and quality since construction of the CVP, where such decline could be attributed to the CVP (based on direct and indirect loss of habitat from CVP facilities and use of CVP water). These include rare serpentine soil

habitat, alkali desert scrub and associated grasslands, vernal pools, foothill chaparral, riparian and associated oak woodlands.

Current Status: To date, the program has directed approximately 24 million dollars to fund 90 conservation actions. These actions include habitat protection (fee title/easement acquisition), habitat restoration, research, and planning. As of FY 2009, the program has contributed to the protection of 92,430 acres and restoration of 7,400 acres. The program has also funded over 70 research and planning actions.

Proposed Actions for FY 2010: Funding would be used for acquisition of fee title, conservation easements, restoration, and management of habitats as well as surveys and studies for listed, proposed, or candidate species to facilitate better management decisions for acquisition, restoration, and management. The Program will focus on protecting, restoring, and conserving threatened serpentine soil habitats, grassland and alkali scrub habitats in the southern Valley, vernal pools wetlands in CVP impacted areas, chaparral, riparian and associated oak woodland habitats throughout the Valley. All projects will focus on improving conditions for CVP impacted species.

Anadromous Fish Screen Program (AFSP)

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(21)

FY 2010 Budget Request (000's): \$1,100

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$950
U.S. Fish and Wildlife Service	\$150

Project Description: The primary objective of the Anadromous Fish Screen Program (AFSP) is to protect juvenile chinook salmon (all runs), steelhead trout, green and white sturgeon, striped bass and American shad from entrainment at priority diversions throughout the Central Valley. Section 3406 (b)(21) of the Central Valley Project Improvement Act requires the Secretary of the Interior to assist the State of California in developing and implementing measures to avoid losses of juvenile anadromous fish resulting from unscreened or inadequately screened diversions on the Sacramento and San Joaquin Rivers, their tributaries, the Delta, and the Suisun Marsh. Additionally, all AFSP projects meet Goal 3 of the CALFED Ecosystem Restoration Program's (ERP) Draft Stage 1 Implementation Plan (8/1/01, Page 22) which states that, "the goal is to maintain and/or enhance populations of selected species for sustainable commercial and recreational harvest, consistent with the other ERP Strategic Goals."

Current Status: Prior year AFSP funding has contributed to the completion of preconstruction project activities including engineering feasibility studies, environmental compliance and project design for the Natomas Mutual Water Company, Western Shasta Conservation District, Family Water Alliance, West Stanislaus Irrigation District,

Department of Fish & Game (Lake California), RD 2035, City of Yuba City, Yuba County Water Agency, Meridian Farms Water Company, and Patterson Irrigation District fish screen projects.

In 2008, construction of the RD 108 “Combined Pumping Plant and Fish Screen Project” was completed. This project involved combining three of RD 108’s largest existing unscreened pumping plants on the Sacramento River into one new 300 cfs pumping plant with a positive barrier fish screen.

Proposed Actions for FY 2010: FY 2010 funds are anticipated to be used for cost share funding for environmental, design and/or construction activities for a number of fish screen projects. The selection of these projects will be made based AFSP prioritization criteria which include: willing applicant, cost effectiveness, biological benefits, availability of non-Federal cost share, and ability to obtain preconstruction monitoring data.

Water Acquisition

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(3)-(d)(2)

FY 2010 Budget Request (000’s): \$8,700

Estimated Inter-agency Breakdown:

Agency	\$000’s
U.S. Bureau of Reclamation	\$8,388
U.S. Fish and Wildlife Service	\$312

Project Description: Three key objectives of the Water Acquisition Program (WAP) are to:

(1) Provide supplemental water supplies for refuges, referred to as Incremental Level 4, for critical wetland habitat supporting resident and migratory waterfowl, threatened and endangered species, and wetland dependent aquatic biota [CVPIA Sections 3406 (b)(3) and (d)(2)].

(2) Acquire instream flows in support of the San Joaquin River Agreement (SJRA) [CVPIA Section 3406 (b)(3)]. The increased flows benefit numerous resident and anadromous fish species, but are acquired primarily to benefit Chinook salmon.

(3) Acquire water to improve spawning and rearing habitat and increase migration flows for fall, winter and spring run Chinook salmon and steelhead in support of the Anadromous Fish Restoration Plan (AFRP) [CVPIA Section 3406 (b)(3)].

Current Status: The WAP continues its efforts to:

(1) Provide supplemental refuge water supplies (Incremental Level 4) through annual purchases. As a supplement to surface water acquisitions, in 2010 the WAP will continue

to investigate and implement groundwater projects in order to lower costs and increase reliability of providing supplemental refuge water supplies. Refuge water quality data will be collected and analyzed to assess the potential for long-term groundwater projects while providing short-term Incremental Level 4 supplies.

(2) Provide additional instream flows in support of the SJRA. The WAP acquires water for the SJRA from the San Joaquin River Group Authority and its member agencies to provide additional spring and fall fishery flows on the Stanislaus, Tuolumne, Merced, and lower San Joaquin rivers. The SJRA expires in 2009 and may be extended.

(3) Acquire water to improve spawning and rearing habitat to increase salmon and steelhead in support of the AFRP to the extent funds are available.

Proposed Actions for FY 2010: Actions to be implemented include the following:

(1) Acquire and provide supplemental water for refuges referred to as Incremental Level 4, for critical wetland habitat supporting resident and migratory waterfowl, threatened and endangered species, and wetland dependent aquatic biota.

(2) Provided the San Joaquin River Agreement (SJRA) is extended, Reclamation will acquire and manage instream flows in support of the Vernalis Adaptive Management Plan and SJRA.

(3) If funds are available, acquire instream flows to improve spawning and rearing habitat and increase migration flows for fall-, winter-run and spring-run Chinook salmon and steelhead, in support of the Anadromous Fish Restoration Plan and in coordination with the CALFED Environmental Water Account or similar environmental water programs.

Dedicated Project Yield

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(2)

FY 2010 Budget Request (000's): \$600

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$254
U.S. Fish and Wildlife Service	\$346

Project Description: The Department of the Interior has the responsibility to dedicate and manage annually 800,000 acre-feet of CVP water (b)(2) water) for fish, wildlife, and habitat restoration purposes and assist the State of California in its efforts to protect the waters of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. The management of (b)(2) water is being closely coordinated with the management of the CALFED Environmental Water Account (EWA). The program objectives are to: (1) improve habitat conditions for anadromous fish in CVP controlled rivers and streams and the Bay-Delta to help meet the AFRP doubling goals; (2) increase survival of out migrant

juvenile anadromous fish, especially in the Bay-Delta; (3) enhance recovery of listed threatened and endangered fish species; and (4) monitor and evaluate to assess the effectiveness of (b)(2) measures.

Current Status: The May 2003 Decision on Implementation of Section 3406(b)(2), clarified as necessary due to recent court decisions, will be implemented for the sixth year in 2009, upstream actions will be implemented; and monitoring and evaluation to assess the effectiveness of (b)(2) environmental measures will continue.

Proposed Actions for FY 2010: Funding will be used to continue efforts associated with dedication and management of 800,000 acre-feet of CVP yield for the primary purposes included under Section 3406(b)(2) of the CVPIA, and in accordance with the May 2003 Decision on Implementation of Section 3406(b)(2) and recent Federal court decisions.

Clear Creek Restoration

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(12)

FY 2010 Budget Request (000's): \$600

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$425
U.S. Fish and Wildlife Service	\$175

Project Description: The purpose of the Clear Creek Restoration Program is to: (1) restore stream channel form and function necessary to optimize habitat for salmon and steelhead and the aquatic and terrestrial communities on which they depend; (2) determine long-term flow needs for spawning, incubation and rearing by conducting an Instream Flow Incremental Methodology study as mandated in Section 3406 (b)(12); (3) provide flows of adequate quality and quantity to meet the requirements of all life stages of Chinook salmon and steelhead trout known to use Clear Creek; (4) provide spawning gravel to replace supply blocked by Whiskeytown Dam; and (5) monitor project results.

Current Status: In FY 2009, Clear Creek restoration will focus on providing flows, restoring stream channel and instream habitat, and conduct monitoring to determine impacts of restoration actions.

Releases from Whiskeytown Dam will provide downstream fish habitat that is at least 90 percent of the maximum possible weighted usable area, will allow water temperatures to comply with the National Marine Fisheries Service's biological opinion, and allow passage of adult anadromous fish at the former McCormick-Saeltzer Dam location. Stream channel and instream habitat restoration will include placing about 25,000 tons of spawning gravel, continue design and permitting for using abandoned dredger mine tailings as an inexpensive source of spawning gravel for future placements, and continue preparing long-term programmatic environmental permits for various restoration actions. Monitoring activities will include work to ascertain impacts of restoration actions on

fishery and geomorphic resources and determine the amount of spawning gravel needed to maximize the amount of spawning habitat.

Proposed Actions for FY 2010: Actions to be implemented include the following: (1) continue monitoring the program, documenting and quantifying juvenile production of steelhead and spring-run Chinook salmon; (2) increase the quality and quantity of spawning habitat by placing clean spawning-sized gravel at several locations along the creek, new injection sites will be developed downstream of Whiskeytown Dam in accordance with the OCAP Biological Opinion; (3) conduct analyses to determine the need to implement Phase 3C of the Channel Restoration Project; (4) conduct analyses to determine need and feasibility of increasing juvenile rearing habitat from Clear Creek Road Bridge downstream to the upstream extent of the Channel Restoration Project; and (5) if needed, continue work to develop: an implementation plan, hydraulic analyses, and permitting in support of the CALFED Environmental Water Program to acquire channel maintenance flows in Clear Creek.

Spawning Gravel/Riparian Habitat

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(13)

FY 2010 Budget Request (000's): \$500

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$430
U.S. Fish and Wildlife Service	\$70

Project Description: The purpose of the Spawning Gravel/Riparian Habitat Program is to increase the availability of spawning gravel and rearing habitat, and subsequently monitor the results of these actions, for: (1) Sacramento River Basin Chinook salmon and steelhead trout in the reach of the mainstem Upper Sacramento River from Keswick Dam downriver to Red Bluff Diversion Dam; (2) American River Basin Chinook salmon and steelhead trout in the reach of the American River downriver from Nimbus Dam; and (3) Stanislaus River Chinook salmon and steelhead trout in the reach of the Stanislaus River downriver from Goodwin Dam.

Current Status: Gravel placement occurs each year in the upper Sacramento River downstream from Keswick Dam. New placement sites are being scoped and projects addressing rearing and spawning habitat limitations are planned starting in 2010. Monitoring of past projects is ongoing and a sediment budget is being developed.

The American River gravel placement program has identified sites as part of a five year series of projects between Nimbus Dam and River Bend Park to address spawning habitat and rearing habitat limitations. Projects include mainstem gravel placement and side channel creation for spawning and rearing habitat targeting steelhead. Monitoring of the effectiveness of past projects is ongoing.

The Stanislaus River program has identified rearing habitat as a key limitation to Chinook salmon so projects in 2010 will target gravel placement to enhance rearing and spawning habitat in conjunction with the Anadromous Fish Restoration Program. Monitoring of the effectiveness of past projects is ongoing.

Proposed Actions for FY 2010: Funding will be used for gravel restoration projects on the Upper Sacramento, American, and Stanislaus rivers immediately downstream from Keswick, Nimbus, and Goodwin dams, respectively. Preliminary planning and engineering are underway in newly identified downstream areas to determine optimal gravel placement. Permits and environmental documentation will be obtained and processed, engineering completed, and gravel replenishment projects implemented.

Bay-Delta Conservation Plan (BDCP)

Authority: P.L. 85-624, Fish and Wildlife Coordination Act; and P.L. 108-361, Title I, Section (d)(6)

FY 2010 Budget Request (000's): \$7,850

Project Description: The BDCP is a conservation plan prepared to meet the requirements of the Federal and California Endangered Species Act (FESA and CESA) and the State of California's Natural Communities Conservation Planning Act (NCCPA). The BDCP will provide FESA and CESA incidental take permits for water operations and management activities in the statutory Sacramento-San Joaquin Delta to the State of California and State and Federal water contractors. A Steering Committee including State and Federal agencies, State and Federal water contractors, and environmental interest groups has been formed to discuss key policy and strategy issues pertaining to BDCP development.

Current Status: During 2007, a consultant team evaluated four potential Conservation Strategy Options based on existing scientific information regarding environmental stressors affecting covered fish species and Delta ecosystem processes. A Conservation Strategy Options Evaluation Report (dated 9/17/07) documents the outcome of each of the 4 Options relative to 17 evaluation criteria identified by the Steering Committee. In November 2007, the Steering Committee reached agreement on the basic approach to development of the BDCP, including potential improvements to the water conveyance system and strategies for in-Delta habitat restoration and enhancement. It was agreed that the BDCP will also address water operations and management, conservation actions to address other stressors (e.g., toxics, non-native introductions, and harvest), monitoring and adaptive management, scientific input, cost and funding, and implementation structure and decision-making. Steering Committee subgroups include science, membership, technical, and public outreach. Additional workgroups and technical teams have been established to address biological goals and objectives, habitat restoration and enhancement, conservation actions to address other stressors, water conveyance, analytical tools, and in-Delta water quality during preparation of the BDCP.

Development of the conservation strategy and an administrative Draft of the BDCP are scheduled for completion by mid-2009.

Proposed Actions for FY 2010: Issuance of the public Draft BDCP and associated Draft EIS/EIR and associated engineering analysis is anticipated in December 2009. A final BDCP and EIS/EIR is scheduled for release in June 2010. A signed Record of Decision/Notice of Determination, FESA and CESA permits, and implementation agreements are expected in late 2010.

Comprehensive Assessment and Monitoring Program

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(16)

FY 2010 Budget Request (000's): \$800

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$150
U.S. Fish and Wildlife Service	\$650

Project Description: The Comprehensive Assessment and Monitoring Program (CAMP) is intended as the vehicle for comprehensively assessing the effects of all CVPIA restoration actions under Section 3406(b). The program has two objectives: (1) assess the overall (cumulative) effectiveness of actions implemented under CVPIA Section 3406(b), and (2) assess the relative effectiveness of categories of actions under CVPIA Section 3406(b). This will be primarily a data compilation and assessment effort, using ongoing project-specific and general monitoring to assess the progress of 3406 (b) actions.

Current Status: The Program will continue efforts to monitor and evaluate the progress of CVPIA implementation actions as well as the progress toward achieving the anadromous fish doubling goals. Utilization of this information will allow the adaptive management of the CVPIA anadromous fish restoration efforts. The 2007 CAMP annual report provides a synthesis and analysis of anadromous fish monitoring data collected between 1992 and 2006. This report suggests the majority of the AFRP production targets have not been met on a regular basis. This trend suggests a substantial increase in habitat restoration efforts will be required to promote measurable increases in Chinook salmon production and thereby achieve the AFRP fish production targets.

The CAMP is conducting a comprehensive assessment to determine the program's future scope, direction, and costs. The results from the assessment will be included in a programmatic document that updates the 1997 CAMP Implementation Plan. This assessment will: (1) review past and ongoing monitoring projects and identify existing data gaps that must be addressed to achieve the CAMP program objectives; (2) quantify the cost for completing critical monitoring activities that are not occurring but should take place between FY 2009 and 2014; (3) identify the partnerships CAMP should pursue to cooperatively fund projects where a partner may share a common interest; (4) describe methods for assimilating and storing data collected by CVPIA programs; (5) identify

strategies for incorporating monitoring data into decision making efforts; and (6) identify mechanisms for providing monitoring information to interested parties.

The CAMP is currently working with entities that collect data summarized in CAMP reports. These efforts are intended to: (1) clarify how data have historically been collected; (2) provide templates for reporting data, analyses, and results to CAMP; and (3) provide more robust data collection techniques that describe the accuracy and precision of data that are collected.

The CAMP will fund constant fractional marking of fall-run Chinook salmon at Coleman and Nimbus Hatcheries in 2009. The constant fractional marking program will enable estimates of the proportion of naturally produced and hatchery produced Chinook salmon contributing to commercial and recreational fisheries and in-river escapements. This data is essential in determining progress towards meeting the CVPIA goal of doubling naturally produced Chinook salmon and evaluating success of restoration actions.

Proposed Actions for FY 2010: Continue to provide direction to data collection activities throughout the Central Valley that contribute to evaluation of CVPIA restoration activities. Produce an annual report describing progress made towards meeting CVPIA restoration goals. Implement a comprehensive database to document and understand changes in the abundance of juvenile Chinook salmon. Operate a rotary screw trap on the Stanislaus River to quantify juvenile salmonid production. Collect, review, and standardize rotary screw trap data quantifying the number of juvenile Chinook salmon caught in the Central Valley.

WATER USE EFFICIENCY

Water Conservation

Authority: P.L. 97-293 Section 210, P.L. 102-575, Section 3405 (e)

FY 2010 Budget Request (000's): \$3,892

Project Description: The Mid-Pacific Regional Office's Water Conservation Team (Team) administers the Central Valley Project (CVP) Water Conservation Program (Program) activities with assistance from the Area Offices. The Team performs duties required under the Central Valley Project Improvement Act of 1992 (CVPIA) (P.L. 102-575) and the Reclamation Reform Act of 1982 (RRA) (P.L. 97-293), which includes the development and administration of various Criteria – the Standard Criteria for Evaluating Water Management Plans, the Regional Criteria for the Sacramento Valley, and the Criteria for Developing Refuge Water Management Plans. Section 3405 (e) of the CVPIA, P.L. 102-575, directs the Secretary of the Interior (Secretary) to establish and administer an office on Central Valley water conservation best management practices that shall “. . . develop criteria for evaluating the adequacy of all water conservation plans developed by project contractors, including those plans required by Section 210 of the RRA, Public Law 97-293.”

In FY 2008, the Team implemented water conservation measures through a competitive, water use efficiency grant program offered to water districts, irrigation districts, resource conservation districts, urban water agencies, etc. This program is designed to encourage cost shared water conservation projects that meet the objectives contained in the CALFED Water Use Efficiency Program. Benefits of the awarded projects will include increased water supply reliability, water quality improvements, and contributions to ecosystem restoration. In addition, the funds will assist water contractors with the implementation of Best Management Practices, while focusing on water districts with a CALFED Bay-Delta connection.

Current Status: The Team continues to provide Federal leadership and expertise required to evaluate Plans and water use efficiency projects. The Team provides technical and financial assistance to water districts to prepare Plans and implement conservation measures. The competitive grant process will be completed and projects awarded by September 2009. The Administration will seek additional authority as necessary. Through multiple public outreach efforts, Reclamation is maintaining an active water conservation program for its contractors and the public. Program staff works closely with other Federal, state, local, and environmental constituents on water conservation issues and policy development. The Conservation Connection Newsletter and the Watershare website are used to inform the public on Mid-Pacific Region water conservation activities and grant opportunities.

Proposed Actions for FY 2010: Funding will be used to staff a portion of the Central Valley Office of Water Conservation. Activities include criteria revision, plan review, technical assistance, coordination with other agencies, publish news letter, host web site, drought assistance and participation in the administration of Water for America grants. Approximately \$1.2 million will be used to fund and administer grant programs offered to water districts, irrigation districts, resource conservation districts, urban water agencies, etc. Types of grant offers include Field Services Program, Water Use Efficiency, Technology Transfer to water districts, and Education.

San Jose Area Water Reclamation and Reuse Program

Authority: P.L. 102-575, Title XVI, Section 1607, as amended, Reclamation Wastewater and Groundwater Study and Facilities Act of 1992; P.L. 104-266, Reclamation Recycling and Water Conservation Act, October 1996

FY 2010 Budget Request (000's): \$100

Project Description: This program calls for the planning, design, and construction of demonstration and permanent facilities to reclaim and reuse up to 36,000 acre-feet per year of wastewater treatment plant effluent in the San Jose metropolitan service area, in cooperation with the City of San Jose and Santa Clara Valley Water District. The total program includes about 300 miles of pipelines over a 150 square mile area in six cities providing reclaimed water to the San Jose metropolitan service area. The total program cost is estimated at \$480 million, with the Federal contribution capped at \$109.9 million.

Current Status: Phase I construction was completed in 1998, providing over 10,000 acre-feet of recycled water. For Phase I, Reclamation is reimbursing the City of San Jose by providing up to 25 percent or up to \$35 million.

Proposed Actions for FY 2010: Funding will be used to continue the reimbursement to the City of San Jose for Phase I project construction, and to coordinate with the City regarding any future work.

Bay Area Regional Water Recycling Program

Authority: P.L. 102-575 – Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992; and P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996

FY 2010 Budget Request (000's): \$3,000

Project Description: The Bay Area Regional Water Recycling Program (BARWRP) is a partnership of federal, state, and local agencies focused on the feasible use of recycled water in the five-county San Francisco Bay Area that is home to almost one-sixth of California's population. Bay Area water recycling will assist CALFED achieve success in meeting its objectives related to water supply, water quality, and ecosystem enhancement. By maximizing utilization of recycled water for its permitted demands, water agencies can reduce the demands on their current high-quality water supplies and limit the need for new, possibly lower-quality supplies in the future. The CALFED Bay-Delta Program recognizes that increased water recycling should be part of the comprehensive solution for improving the Bay-Delta ecosystem. BARWRP plans to generate approximately 240,000 acre-feet per year of new supply by 2025 to partially meet the identified recycled water demand of 400,000 acre-feet per year.

Current Status: The number of authorized projects included in BARWRP is eight (Antioch, North Coast County, Palo Alto/Mountain View, Pittsburg, Redwood City Phase 1, San Jose, South Bay Advanced Treatment, and South Santa Clara County) and is expected to increase by at least five by FY 2011 (Central Contra Costa Sanitary District, Dublin San Ramon Services District, City of Palo Alto, City of Petaluma, and Redwood City Phase 2). The estimated Federal cost share for the five additional projects is \$21,775,000.

Proposed Actions for FY 2010: Construction work will continue on the authorized projects, including but not limited to the construction of pipelines, pumping facilities, and storage facilities, and feasibility work will continue on other projects. For the eight authorized projects, the total Federal cost share is approximately \$35,850,000.

San Gabriel Basin Project

Authority: P.L. 102-575 – Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992; P.L. 103-126, Water and Energy Appropriations Act for 1994, October 28, 1993; P.L. 104-266, Reclamation Recycling and Water Conservation Act, October 9, 1996; and P.L. 108-418, to amend The Reclamation Projects Authorization and Adjustment Act of 1992 to increase the Federal share of the costs of the San Gabriel Basin Demonstration Project, November 30, 2004

FY 2010 Budget Request (000's): \$934

Project Description: This project is located in the San Gabriel Valley of Los Angeles County, California, and consists of three units:

(1) The San Gabriel Basin Demonstration Project is a conjunctive use project that was originally envisioned to address the most severe area of groundwater contamination within the San Gabriel Basin, namely the Baldwin Park Operable Unit, which is an Environmental Protection Agency Superfund site. However, after additional investigations, it was apparent that a comprehensive solution to the water supply and groundwater contamination problems was required to adequately protect the groundwater resources of the San Gabriel Basin. Additional operable units within the San Gabriel Basin, known as the El Monte, South El Monte, and Puente Valley Operable Units were included in the project to provide such a comprehensive remedy. The revised project continues to meet the original objectives by implementing conjunctive use projects that will enhance both the groundwater quality and the local and regional water supply. Treatment projects will remove volatile organic compounds and other contaminants from the groundwater and then deliver the water for distribution. When completed, the total capacity will be about 39,000 acre-feet annually. Extraction, treatment, and distribution of San Gabriel Basin groundwater will improve the basin's groundwater quality, increase storage capacity, and expand the basins use for regional benefits.

(2) The Rio Hondo Water Recycling Program will distribute 5,600 acre-feet of recycled water annually from the San Jose Creek Water Reclamation Plant for landscape irrigation and industrial process water. This use of recycled water will replace the need for a like amount of potable water, thereby lessening the demand on both imported and groundwater resources. By reducing the need for groundwater pumping, this program will assist in the prevention of further migration of contamination from the San Gabriel plume, and wastewater discharges to the ocean will be decreased. Components of the program are construction of a main pump station, a booster pump station, reservoir storage facilities (10 million gallons), and approximately 40 miles of pipeline. The program is being implemented in two phases.

(3) The San Gabriel Valley Water Reclamation Program will utilize up to 10,000 acre-feet of reclaimed water annually from the San Jose Creek Water Reclamation Plant to recharge the San Gabriel groundwater basin in order to replace and/or supplement water currently being imported and recharged. There will be no net change in the amount of

water currently being recharged as a result of implementation of this program. The recharge will be accomplished in the San Gabriel River channel downstream of Santa Fe Dam. Additional facilities to use up to 13,300 acre-feet of reclaimed water annually for landscape irrigation and industrial use are also included.

Current Status: Construction is underway on all components. Portions of each component have been completed and are operational.

Proposed Actions for FY 2010: Work for FY 2010 will continue on the construction of facilities to contain and treat the contaminated groundwater in the San Gabriel Basin. Work will also continue on Phase 2 of the Rio Hondo Water Recycling Program, consisting of recycled water distribution pipelines. Work will also continue on the San Gabriel Valley Water Reclamation Project by the Upper San Gabriel Valley MWD, consisting of pipelines, pumping facilities, and storage facilities. As of September 30, 2008, this project has used 73 percent of its authorization ceiling. The project is scheduled for completion in 2013.

San Diego Area Water Reclamation Program

Authority: P.L. 102-575 – Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992; and P.L. 104-266, Reclamation Recycling and Water Conservation Act, October 9, 1996

FY 2010 Budget Request (000's): \$2,336

Project Description: Greater use of reclaimed water results in decreased dependency on potable imported water including water from the Colorado River. This project consists of four units:

(1) The San Diego Water Reclamation Project is a regional water reclamation program being implemented by the cities of San Diego and Poway, Sweetwater Authority, and Otay Water District. The project provides for the construction of five new wastewater treatment plants, expansion of an existing plant, along with distribution systems, and two conjunctive use projects. Total system capacity upon completion will be approximately 57,116 acre-feet per year.

(2) The Escondido Water Reclamation Project is being implemented by the city of Escondido to upgrade its Hale Avenue Resource Recovery Facility from secondary treatment to tertiary treatment. A distribution system that will put the recycled water to beneficial use for non-potable purposes is also being constructed. In addition, the city of San Diego is planning to upgrade and expand its San Pasqual Water Reclamation Plant, which will produce recycled water for non-potable uses, and for a possible conjunctive use project. A distribution system will also be constructed. The City of Poway will construct a distribution system that will utilize recycled water from the San Pasqual Plant. When completed, the three project components will deliver a total of approximately 11,200 acre-feet of recycled water annually.

(3) The San Diego Water Repurification Project has been stopped by the city of San Diego, and the reclaimed water and funds that would have been used for this project are now included in the San Diego Water Reclamation Project.

(4) The Padre Dam Municipal Water District Reclamation Project will upgrade and expand an existing water treatment plant and construct a distribution system that will deliver 2,000 acre-feet of recycled water annually.

Current Status: Construction and expansion of recycled water systems by the City of San Diego, Otay Water District, Sweetwater Authority, and Padre Dam Municipal Water District are underway. Portions are completed and operational.

Proposed Actions for FY 2010: Work for FY 2010 will continue on the construction of recycled water distribution systems (pipelines, pumping facilities, and storage facilities) from the City of San Diego's North City WRP and South Bay WRP. Work will also continue on recycled water systems being constructed by the Otay Water District, the Sweetwater Authority, and the Padre Dam Municipal Water District. As of September 30, 2008, this project has utilized 51 percent of its authorization ceiling. The project is scheduled for completion in 2028.

Calleguas Municipal Water District Recycling Project

Authority: P.L. 102-575 – Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992; and P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996

FY 2010 Budget Request (000's): \$935

Project Description: This project consists of planning, designing, and constructing regional water recycling projects that include wastewater reclamation and reuse, brackish groundwater recovery, and regional salinity management projects. A total of ten specific projects are planned resulting in annual recycling or recovery of a total of 51,470 acre-feet of water in order to reduce the regions dependence on imported water supplies. This project is located in Ventura County, California.

Current Status: Two components will be funded in FY 2010. The Conejo Creek Diversion was completed in 2003 and is operational. Construction of the Regional Brine Line is underway.

Proposed Actions for FY 2010: Work will continue on the Regional Brine Line being constructed by the Calleguas MWD. As of September 30, 2008, this project has used 54 percent of its authorization ceiling. The project is scheduled for completion in 2014.

Long Beach Desalination Research and Development Project

Authority: P.L. 102-575 – Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992; and P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996

FY 2010 Budget Request (000's): \$467

Project Description: This project is located in Los Angeles County, California. In partnership with the City of Long Beach and the Los Angeles Department of Water and Power, this research and development project will determine the feasibility of a new method of seawater desalination that uses existing membrane technology. Significant cost savings due to lower energy requirements are anticipated.

Current Status: The pilot plant has been constructed, and is being operated to collect data. An experimental system for intake and discharge using pipelines installed under the sea bed has been installed and is being evaluated.

Proposed Actions for FY 2010: For FY 2010 work will continue on the pilot plant, and if successful, preliminary work on a larger sized demonstration unit will begin. As of September 30, 2008, the project has used 33 percent of its authorization ceiling. The research and demonstration project is scheduled for completion in 2015.

Long Beach Area Recycling Project

Authority: P.L. 102-575 – Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act, October 30, 1992; and P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996

FY 2010 Budget Request (000's): \$935

Project Description: This project is located in Los Angeles County, California, and consists of two units:

(1) The Alamitos Barrier Reclaimed Water Project will ultimately recycle about 8,000 acre-feet per year in lieu of imported water. Facilities will be constructed so that tertiary treated water from the existing Long Beach Water Reclamation Plant can be treated to advanced levels so that it can be used for groundwater injection into seawater intrusion barriers. Phase 1 was completed in 2005, and Phase 2 is scheduled to begin construction in 2010.

(2) The City of Long Beach Recycled Water System Expansion Project will construct an expansion of an existing distribution system that allows the use of recycled water throughout the city. The expansion consists of pumps, pipes, storage facilities, and control systems that would increase use of recycled water from 4,585 acre-feet per year to 16,677 acre-feet per year (including the Alamitos Barrier Project).

Current Status: Phase 1 of the Alamitos Barrier Project is complete and operational. Phase 2 preconstruction activities will begin in 2009. Construction of the recycled water system expansion for the City of Long Beach is underway.

Proposed Actions for FY 2010: For FY 2010 work will continue on the expansion of the City of Long Beach's recycled water distribution system, including the construction of pipelines, pumping facilities, and storage facilities. Work will also begin on construction of Phase 2 of the Alamitos Barrier Reclaimed Water Project. As of September 30, 2008, the project has used 53 percent of its authorization ceiling. Alamitos Barrier Reclaimed Water Project is scheduled for completion in 2012. City of Long Beach Recycled Water System Expansion Project is scheduled for completion in 2018.

DRINKING WATER QUALITY

Drainage Management Program

Authority: P.L. 86-488

FY 2010 Budget Request (000's): \$1,350

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$1,150
U.S. Fish and Wildlife Service	\$200

Project Description: A Record of Decision on Reclamation's efforts to develop a solution to address outstanding Federal drainage obligations under the 1960 San Luis Act, including efforts outlined in the Plan of Action for Drainage to the San Luis Unit submitted to the District Court in April 2001, in compliance with the Court's order, was completed in 2007. The FY 2010 budget request continues Reclamation's participation in the ongoing Grasslands Bypass Project. The Grassland Bypass Project results in annual reductions in discharge of salts, selenium, and other constituents to the San Joaquin River.

Current Status: A Final EIS was completed in May 2006. A Record of Decision was completed in March 2007. Federal costs of drainage service alternatives exceed \$2 billion, exceeding the authorized appropriation ceiling contained in the San Luis Act. Meanwhile, Reclamation has continued to support on the ground drainage projects including the Grassland Bypass Project while these long term solutions are pursued. The Grassland Bypass Project provides drainage to the northerly San Luis Unit and adjacent area and includes actions consistent with both Reclamation's Feasibility Report alternative and the alternative resolution concepts under consideration. The project has broad support among all stakeholders including the environmental community.

Proposed Actions for FY 2010: FY 2010 funding will be used to continue Reclamation's involvement/support in the Grassland Bypass Project. Reclamation funding supports Reclamation & FWS participation in monitoring, data management and reporting, and other activities.

San Joaquin Basin Action Plan

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (d)(5)

FY 2010 Budget Request (000's): \$856

Project Description: Reclamation and the U.S. Fish and Wildlife Service (FWS) are to complete the design for the Phase II East Bear Creek Unit facilities of the San Luis National Wildlife Refuge, Los Banos, California. Planning for this Unit has proceeded separately from other San Joaquin Basin Action Plan lands due to its location on the east side of the San Joaquin River. This refuge is projected to be a 4,000 acre site that will have emergent and riparian wetlands and wetland associated upland areas. FWS has obtained previous funding under the North American Wetlands Conservation Act which has funded the program to restore and enhance the East Bear Creek Unit to a more natural environment. Under the San Joaquin Basin Action Plan and the mandate of CVPIA, Reclamation is responsible for the planning, design, and construction of the water conveyance infrastructure of the East Bear Creek Unit facility.

Current Status: In FY 2009 funds are being used to complete the second to last major refuge facility construction for delivery of refuge water supplies within San Joaquin Basin Action Plan lands. Specific efforts will include: 1) Construction related activities for the East Bear Creek Unit Phase I, San Luis National Wildlife Refuge. Work is essentially complete for the physical infrastructure. Preliminary testing of the pumping plant, pipeline, and storage tanks was done in November. Additional testing and final acceptance of the work from the construction is planned in the spring of 2009; and 2) Newman Canal (service to China Island Unit) design and construction effort for an automated self cleaning trash removal system. Construction is scheduled to be complete before the end of FY 2009

Proposed Actions for FY 2010: Funds for the following activities require \$856,000 which includes \$356,000 from the Water and Related Resources request. Requested funds will help to meet program needs to complete refuge facility construction for delivery of refuge water supplies within San Joaquin Basin Action Plan lands. Specific funding efforts will include: construction related activities for the East Bear Creek Unit Phase I, San Luis National Wildlife Refuge; and Newman Canal (service to China Island Unit) design and construction effort.

Land Retirement

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3408 (h)

FY 2009 Budget Request (000's): \$500

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$400
U.S. Fish and Wildlife Service	\$100

Project Description: The purpose of the Land Retirement Program (LRP) is to evaluate impacts and benefits of retiring 15,000 acres of land from irrigated agriculture. The LRP will continue to purchase land from willing sellers as part of a Demonstration Project up to the targeted 15,000 acres and remove it from irrigated agriculture. Five years of monitoring conducted as part of the Land Retirement Demonstration Project (LRDP) indicate that retired lands have great potential to be restored to productive wildlife habitat, with potentially important endangered species benefits.

Current Status: The LRP has acquired approximately 9,300 acres to date, and retired approximately 8,900 acres from irrigated agricultural production. In 2008, the program restored 320 acres to upland wildlife habitat. Implementation of the LRDP has eliminated the production of approximately 3,600 acre feet of poor quality drain water annually.

On average, the LRP has exceeded its land restoration performance goal of 400 acres per year. Since 1998, the LRP has restored approximately 5,300 acres. Restoration efforts on retired lands immediately increased biodiversity and abundance, including Special Status Species. Wildlife surveys of restored units observed important findings of sensitive San Joaquin Valley wildlife species, including populations of endangered Tipton kangaroo rats, burrowing owls, coast horned lizards, San Joaquin Valley Coachwhips, Swainson's hawks and a sensitive plant called Hoover's Woollystar.

Proposed Actions for FY 2010: Funds will be used to acquire and retire lands from irrigated agricultural production due to poor drainage conditions. Actions will continue land acquisition, research, ecological restoration, site management, reporting, and outreach at the two demonstration project sites.

Ecological restoration at Atwell Island demonstration project will continue in pursuit of the restoration target of 400 acres per year. Threatened and endangered species recovery, habitat improvement, and drainage water reductions are the primary benefits.

San Joaquin River Salinity Management

Authority: P.L. 86-488; and P.L. 108-361, Title I, Section 103 (d)(2)(D)

FY 2010 Budget Request (000's): \$4,250

Project Description: The San Joaquin River Salinity Management Project is an action that contributes to the Program to Meet Standards (PTMS), mandated in Section 103(d)(2)(D) of P.L. 108-361. The project implements the stakeholder-developed "Westside

Regional Drainage Plan” (WRDP). The Plan includes activities to assist the Grassland Bypass area’s program to eliminate drainage to the San Luis Drain, and the plan itself is a key element of Reclamation’s Action Plan to Address the Lower San Joaquin River Salinity TMDL and contributes to resolution of San Luis Unit drainage provision responsibilities. The Plan’s key management components for the Grassland Drainage Area are: 1) Source Control, 2) Groundwater Management, 3) Drainage Reuse Projects, and 4) Drain Water Treatment and/or Salt Disposal.

Current Status: Reclamation has supported implementation of the WRDP. To date, Reclamation has contributed 12 percent of the overall funding for the purchase of 5,800 acres and development of 3,800 of those acres into reuse areas. In 2009-2012, the remaining 2,000 acres will be developed into reuse areas, meeting the interim goal of 6,000 acres of reuse area. Funding has also supported improving distribution efficiencies (eliminating leaks), piloting treatment technologies, and reducing groundwater impacts. As a result, in 2007 about 61 thousand tons of salt were prevented from entering the San Joaquin River.

Proposed Actions for FY 2010: Funding will continue crucial support of the development of the reuse areas (including permitting, land preparation, planting, delivery infrastructure, and wildlife mitigation) and the construction of shallow wells to lower the perched water table and reduce the discharge of nearby subsurface drainage systems. These actions will directly increase the amount of drainage that Grasslands can manage within their boundaries, and prevent its release to the San Joaquin River.

Program to Meet Standards

Authority: P.L. 86-488; and P.L. 108-361, Title I, Section 103 (d)(2)(D)

FY 2010 Budget Request (000’s): \$750

Project Description: The Program to Meet Standards (PTMS) was initiated pursuant to P.L. 108-361, Section 103(d)(2)(D), which directs the Secretary of the Interior, in consultation with the Governor of California, to meet all existing water quality standards and objectives for which CVP has responsibility prior to increasing export limits from the Sacramento-San Joaquin Delta (Delta) for the purposes of conveying water to CVP contractors south of the Delta or increasing deliveries through an intertie between the California Aqueduct and Delta Mendota Canal (DMC). The PTMS may provide greater flexibility in meeting the existing water quality standards and objectives for which the CVP has responsibility and reduce the demand on water from New Melones Reservoir used for that purpose, and to assist the Secretary in meeting any obligations to CVP contractors from the New Melones Project. Reclamation is coordinating implementation with key stakeholders in the San Joaquin Valley. Funding for the PTMS is primarily provided to ensure that the actions identified in the Program, many of which are funded under individual authorities, move in concert to achieve the overall program objectives.

Current Status: Reclamation is continuing program implementation. In 2006, Reclamation submitted the PTMS plan to Congress and initiated implementation. Since FY 2007, funding was used to develop forecasting and monitoring tools needed to implement a real time salinity management program, which is not independently authorized, and implementation of a recirculation pilot program. These actions move the program towards its goal of greater flexibility in meeting existing and future water quality objectives. Other projects that support the PTMS include the South Delta Improvement Program (Permanent Operable Barriers in the Delta), the Delta-Mendota Canal Recirculation Project, Franks Tract Project, the New Melones Operations Plan, and the San Joaquin River Salinity Management Project. Due to the complex nature of water supply and quality issues on the lower San Joaquin River, these projects are all needed to contribute to the Program's objectives.

Proposed Actions for FY 2010: Funding will support the continued testing of wetland best management practices to reduce salinity loads to the San Joaquin River, the potential piloting of alternative treatment of drainage waste, the development and testing of a stakeholder-driven real time salinity management program on the river, and staff support of the program.

STORAGE

CVP, Yield Feasibility Investigation

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3408(j); and P.L. 108-361, Title I, Section 103 (d)(1)(C)

FY 2010 Budget Request (000's): \$450

Project Description: Section 3408(j) of the Central Valley Project Improvement Act (CVPIA) of 1992 directs Reclamation “to develop and submit to the Congress a least-cost plan to increase, within fifteen years after the date of enactment of this title, the yield of the Central Valley Project by the amount dedicated to fish and wildlife purposes under this title.” It further directs Reclamation to examine options to replace the impact of dedicating 1.2 million acre-feet of Project yield for fish and wildlife purposes, such as: (1) improvements in, modification of, or additions to the facilities and operations of the project, (2) conservation, (3) transfers, (4) conjunctive use, (5) purchase of water, (6) purchase and idling of agricultural land, and (7) direct purchase of water rights.

Section 103(d)(1)(C) of P.L. 108-361 directs Reclamation to conduct a study, in coordination with the State, of available water supplies and existing and future water needs within the units of the CVP, the area served by CVP agricultural, municipal, and industrial water service contractors, and the CALFED Bay-Delta solution area. Study findings will be presented in a report to (1) identify possible projects and water management actions that could provide new firm yield and water supply improvements for the CVP while helping California meet its current and future water needs; and (2) assess potential costs, beneficiaries, and their willingness to pay for improvements.

Current Status: Reclamation completed a report entitled “Water Supply and Yield Study,” which is currently undergoing a management level review in advance of submitting the document to Congress, which is expected in 2009. As directed in P.L. 108-361, Reclamation approached the analysis from a supply and demand perspective, and interpreted demand as the amount of water a user desires to apply to a particular use regardless of influencing factors such as price, available supply, or facility constraints. The document considers the average water year demand as the base condition and determines the supply-demand gap regionally relative to available supplies; and it recommends (1) the continued support of the CALFED storage and conveyance projects as well as other statewide water management actions but does not identify specific actions requiring additional authorization, and (2) additional data that could be collected to develop CVP-specific supply-demand gaps. This would allow for further analyses to identify supply-demand gaps by CVP division and projects and water management actions to fill the supply-demand gap by CVP division. A series of workshops was held during 2008 to identify critical success factors, develop management options and funding priorities. The results will be used to prepare a strategy document for future program actions in 2009 and beyond.

Proposed Actions for FY 2010: Funds will be used to continue actions to meet the intent of 3408(j) of Title XXXIV, mitigating the adverse impacts to CVP water supply contractors resulting from implementation of the CVPIA. The CVP Yield Feasibility Investigation Program will continue to monitor water supply trends and evaluate Federal, State, and local programs and projects for their impacts upon CVP yield, as well as any opportunity to increase CVP yield. Integrated resources planning efforts included in the strategy document will be implemented to address management issues and opportunities in the various geographic regions of the CVP to reduce gap between water supplies and demands.

Los Vaqueros Expansion Feasibility Study

Authority: P.L. 108-7, §215, Title II, Division D, and P.L. 108-361, Section 103(d)(1)(A)(i)(II)

FY 2010 Budget Request (000’s): \$308

Project Description: This feasibility study is evaluating the potential to expand the existing Los Vaqueros Reservoir by up to 275,000 acre-feet. Objectives of the study are to develop water supplies for environmental water management, to improve water supply reliability for Bay Area users, and improve the quality of water delivered to Bay Area agencies from the Delta.

Current Status: Technical review of the Administrative Draft EIS/EIR was completed in 2008 and the document is currently undergoing management review. Pending management approval for public release, initiation of the public review and comment period will be the next action. The Administrative Draft Feasibility Report is partially

complete and is currently undergoing technical review. Additional engineering, economics, cost allocation and ability to pay analyses are ongoing. Contra Costa Water District (CCWD) completed a Planning Report in May 2003 that focused on developing sufficient information for the CCWD Board and rate-payers on how an expanded reservoir could meet their Board principles which include improving water quality and supply reliability for the Bay Area, as well as enhancing the Delta. Reclamation completed an Initial Alternatives Information Report in September 2005. Additionally, Reclamation completed an Initial Economic Evaluation for Plan Formulation in May 2006.

Proposed Actions for FY 2010: Funds will be used to complete the Final Feasibility Report and technical, legal, and managerial review of the EIS/EIR.

Upper San Joaquin River Basin Storage Investigation

Authority: P.L. 108-7, Section 215, Title II, Division D; and P.L. 108-361, Title I, Section 103 (d)(1)(A)(ii)(II)

FY 2010 Budget Request (000's): \$877

Project Description: Reclamation is conducting a Feasibility Study in cooperation with the California Department of Water Resources (DWR) as the non-Federal partner that will include preparation of a Feasibility Report/Decision Document and Environmental Impact Statement/Report (EIS/EIR) for the Upper San Joaquin River Basin Storage Investigation. The feasibility study purpose is to determine the type and extent of Federal interest in a multiple purpose plan to provide additional storage in the upper San Joaquin River watershed through enlargement of Millerton Lake at Friant Dam or a functionally equivalent storage program. The primary objectives for storage and management of water supply from the upper San Joaquin River are to improve water supply reliability for agricultural and urban uses and enhance water temperature and flow conditions in the San Joaquin River. Other opportunities and benefits include potential for increased management of flood flows at Friant Dam, improvements to urban water quality and development of hydropower generation and recreational opportunities.

Current Status: An Initial Alternatives Information Report, completed in 2005, describes water resources problems and needs, planning objectives, potential solutions, and recommends future actions. It developed and screened 24 water storage measures down to six measures, which were retained for further study. The San Joaquin River Settlement in 2006 requires changes in fishery releases and management, which affected formulation and evaluation of alternatives for the potential storage project. Reclamation has revised assumptions for existing and future conditions, and performed some reformulation of the planning objectives.

A Plan Formulation Report was completed in October 2008 and is undergoing management review. The report will update agency decision makers and stakeholders on the progress and findings of the ongoing feasibility study, including development and

refinement of a final array of preliminary alternative plans and mitigation requirements, analysis of potential environmental impacts, costs and benefits for further consideration during the feasibility study stage. Each action alternative would contribute directly and indirectly to CALFED Program objectives of water quality, water supply reliability, and ecosystem restoration. Activities in FY 2009 include planning, engineering, environmental, economic and other studies needed to develop the draft Feasibility Report and draft EIS/EIR, scheduled for fall 2009.

Proposed Actions for FY 2010: Funds would be used to respond to public comments on the draft EIS/EIR, revise analyses (if necessary), and prepare a final Feasibility Report and EIS/EIR.

North of Delta Off-Stream Storage (Sites Reservoir) Investigation

Authority: P.L. 108-137, Title II, Section 211, December 1, 2003; and P.L.108-361, Title I, Section 103 (d)(1)(A)(ii)(I)

FY 2010 Budget Request (000's): \$607

Project Description: Reclamation is conducting a Feasibility Study in cooperation with the California Department of Water Resources (DWR) as the non-Federal partner that will include preparation of a Feasibility Report/Decision Document and Environmental Impact Statement/Report (EISR) for the North of Delta Off-Stream Storage (NODOS) Investigation. The Feasibility Study purpose is to determine the type and extent of Federal interest in a multiple purpose plan to provide up to 1.8 million acre-feet of off-stream water storage at a potential Sites Reservoir or alternative locations in the Sacramento Valley North of the Delta. The proposed project would increase water supplies to meet existing contract requirements, including improved water supply reliability and greater flexibility in water management for agricultural, municipal, and environmental purposes; increase the survival of anadromous fish populations in the Sacramento River, as well as the survivability of other aquatic species; and improve drinking and environmental water quality in the Delta.

Current Status: An Initial Alternatives Information Report, completed in 2006, describes water resources problems and needs in the upper Sacramento River and in the Central Valley Project and State Water Project systems, planning objectives, potential solutions, and recommends future actions. Reclamation and DWR are continuing to develop and refine alternative plans for a new reservoir with up to 1.8 million acre-foot of storage capacity and perform related engineering, operational, environmental, and economic studies.

A Plan Formulation Report was completed in October 2008 and is undergoing management review. The report updates decision makers and stakeholders on the ongoing feasibility study, including development and refinement of an array of preliminary alternative plans and mitigation requirements, analysis of potential environmental impacts, costs and benefits, and potential allocation of costs and benefits that will be further evaluated in future phases of the feasibility study. Each action

alternative would contribute directly and indirectly to the CALFED Program objectives of water quality, water supply reliability, ecosystem restoration, and delta levee system integrity. Activities in FY 2009 include planning, engineering, operations, environmental, economic, and other studies needed to develop the draft Feasibility Report and draft EIS/EIR, scheduled for release in the fall of 2009.

Proposed Actions for FY 2010: Funds would be used to respond to public comments on the draft EIS/EIR, conduct and revise planning, engineering, environmental, economic and other studies, and to prepare the final Feasibility Report and EIS/EIR.

Shasta Lake Water Resources Investigation

Authority: P.L. 96-375, 1980; and P.L. 108-361, Title I, Section 103, (d)(1)(A)(i)(I)

FY 2010 Budget Request (000's): \$909

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$897
U.S. Fish and Wildlife Service	\$9
U.S. Forest Service	\$3

Project Description: Reclamation is conducting a Feasibility Study including preparation of a Feasibility Report/Decision Document and Environmental Impact Statement (EIS) for the Shasta Lake Water Resources Investigation (SLWRI). The purpose of the SLWRI is to determine the type and extent of Federal interest in a multiple purpose plan to modify Shasta Dam and Reservoir to increase survival of anadromous fish populations in the upper Sacramento River; increase water supplies and water supply reliability to agricultural, municipal and industrial, and environmental purposes; and to the extent possible through meeting these objectives, include features to benefit other identified ecosystem, flood damage reduction, and related water resources needs, consistent with the objectives of the CALFED Bay Delta Program.

Current Status: A Plan Formulation Report was released in March 2008 to update agency decision makers and stakeholders on the progress and findings of the ongoing Feasibility Study, including development and refinement of a final array of preliminary alternative plans and mitigation requirements, analysis of potential environmental impacts, costs and benefits for further consideration during the feasibility study stage. Each action alternative would contribute directly and indirectly to CALFED Program objectives to improve water supply reliability, ecosystem restoration, and water quality. Activities in FY 2009 include planning, engineering, environmental, economic and other studies needed to develop the Draft Feasibility Report and EIS, scheduled for management review before public release in 2009. Specific activities include refinement of a final array of alternative plans; operational modeling; analyses of potential physical and operational impacts; identification of mitigation requirements; feasibility level engineering designs and cost estimates, including real estate costs; evaluation of potential

cost and benefit effects; allocation of estimated costs and benefits for a recommended plan; and public involvement and outreach.

Proposed Actions for FY 2010: Funds would be used to respond to public comments on the Draft Feasibility Report and EIS, update analyses (if necessary), and/or complete planning, engineering, environmental, economic, financial, and other studies; and to complete the Final Feasibility Report and EIS, including required technical, legal, and managerial review and processing.

Storage Program Post-Feasibility Activities

Authority: P.L. 96-375, 1980 (for Shasta Investigation); P.L. 108-7, §215, Title II, Division D, February 2003 and P.L. 108-137, Title II, Section 211, December 2003 (for Los Vaqueros, NODOS/aka Sites, and Upper San Joaquin River Basin Investigations)

FY 2010 Budget Request (000's): \$1,349

Project Description: Programmatically, Reclamation will respond to requests by management level reviewers and decision makers for supplemental feasibility study analyses, perform those analyses, respond to questions, and coordinate transmittal of the Final Storage Program Feasibility Report.

At the individual project level, Reclamation will respond to requests for supplemental feasibility study analysis for the 4 storage investigations, perform those analyses, respond to questions, and to coordinate transmittal of the supplemental Project Feasibility Reports and supporting documentation to Congress.

Current Status: This activity will be initiated upon completion and transmittal of the existing surface storage feasibility reports and environmental compliance to management level reviewers and decision makers.

Proposed Actions for FY 2010: Funding would support the Programmatic Supplemental Program Feasibility Analysis, which will be initiated at the end of each individual storage investigation.

CONVEYANCE

Tracy (Jones) Pumping Plant Mitigation Program

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(4)

FY 2010 Budget Request (000's): \$2,261

Project Description: This activity identifies and implements physical improvements and operational changes assessing fishery conditions, and assessing salvage operations at the

Tracy Fish Collecting Facility (TFCF) per the Central Valley Project Improvement Act and CVP Operations Criteria and Plan (OCAP) Biological Opinions.

Current Status: Research and operation assessment efforts continues in order to better understand present day operating performance of the TFCF, and to implement physical and operational changes in order to improve overall fish salvage capabilities. This is consistent with current CALFED South Delta Fish Facility Forum recommendations and CVP OCAP Biological Opinions. Some improvements have been implemented and many others are planned through FY 2015.

Proposed Actions for FY 2010: Proposed actions for FY 2010 include continuation of TFCF operational assessment for Chinook salmon, splittail, and white sturgeon. FY 2010 actions also include working on field data collected as a result of TFCF operational assessment for delta smelt and predator impacts and tests related to operation of a new fish transfer bucket. Other anticipated actions include continuing work on concept/design of electric fish crowders and strobe lights as a means of reducing predation impacts at the TFCF, field testing of above ground oval holding tank, publishing of the to be completed various Tracy Research Volume Series, and maintenance of the Tracy Research website.

San Luis Reservoir Lowpoint Feasibility Study

Authority: P.L. 108-361, Title I, Section 103 (f)(1)(A)

FY 2010 Budget Request (000's): \$1,500

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$1,430
U.S. Fish and Wildlife Service	\$70

Project Description: This is a study of potential actions to increase the operational flexibility of storage in San Luis Reservoir and ensure a high quality, reliable water supply for San Felipe Division contractors.

Current Status: In 2009 a Plan Formulation report, a draft Feasibility Report and draft EIS/EIR will be completed. Completion of the final feasibility report and EIS/EIR are anticipated in 2010.

Proposed Actions for FY 2010: Funds would be used to perform planning, engineering, environmental, economic and other studies needed to develop the final Feasibility Report and EIS/EIR. Specific activities will include formulation and refinement of a final array of alternative plans; operational modeling; analyses of potential physical and operational impacts; identification of mitigation requirements; preparation of feasibility level engineering designs and cost estimates, including real estate costs; evaluation of potential cost and benefit effects; allocation of estimated costs and benefits for a tentatively recommended plan; and public involvement and outreach.

Frank's Tract Feasibility Study/Through Delta/Delta Cross Channel Reoperation

Authority: P.L. 108-361, Title I, Section 103 (f)(1)(C)

FY 2010 Budget Request (000's): \$1,600

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$1,530
U.S. Fish and Wildlife Service	\$70

Project Description: Project objective is to significantly reduce salinity concentrations in the south Delta including at the CVP/SWP pumping facilities and to improve fisheries conditions throughout the Delta.

Current Status: Feasibility Study was initiated in 2007 and will continue into 2009. In FY 2009, a Plan Formulation report, a draft Feasibility Report and a draft EIS/EIR will be completed. The final Feasibility Report and final EIS/EIR are anticipated to be completed in 2010.

Proposed Actions for FY 2010: Funds will be used to perform planning, engineering, environmental, economic and other studies needed to develop the draft Feasibility Report and EIS/EIR. Specific activities will include formulation and refinement of a final array of alternative plans; operational modeling; analyses of potential physical and operational impacts; identification of mitigation requirements; preparation of feasibility level engineering designs and cost estimates, including real estate costs; evaluation of potential cost and benefit effects; allocation of estimated costs and benefits for a tentatively recommended plan; and public involvement and outreach.

Delta-Mendota Canal Recirculation Feasibility Study

Authority: P.L. 108-361, Title I, Section 103 (f)(1)(G)

FY 2010 Budget Request (000's): \$250

Estimated Inter-agency Breakdown:

Agency	\$000's
U.S. Bureau of Reclamation	\$203
U.S. Fish and Wildlife Service	\$47

Project Description: The purpose of the feasibility study is to determine if recirculation of excess capacity via the Delta-Mendota Canal and Newman Wasteway, could be used to significantly improve the water quality to meet the objectives of the Program to Meet Standards.

Current Status: The Plan Formulation Report and draft Feasibility Report and draft EIS/EIR are in the final review stages and will be completed in FY 2009. A Final Feasibility report and EIS/EIR are scheduled to be completed by in FY 2010.

Proposed Actions for FY 2010: Funding will be used to complete and process the Final Feasibility Report and EIS/EIR. Review of the draft EIR/EIS may also be partially completed in FY 2010, and following the comment period, the final EIR/EIS and Feasibility Report will be prepared and published. Then, the Record of Decision is expected to be completed by the end of FY 2010. In developing the final reports, engineering, environmental and economic analysis shall be used to refine the data and take into account the possible regulatory decisions that could affect possible pumping and recirculation activities.

South Delta Improvements Program Plan Coordination

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (15); and P.L. 108-361, Title I, Section 103 (f)(1)(D)&(E)(ii)

FY 2010 Budget Request (000's): \$250

Project Description: The South Delta Improvement Program (SDIP) major components are increasing the allowable diversion capacity at the State Water Project's Clifton Court Forebay to 8,500 cfs; construction of permanent operable flow control barriers to improve water level and water quality available for agricultural diversions in the south Delta; dredging portions of Middle River, Old River, and West, Grantline, Victoria, and North Canals to improve flows in south Delta channels; and constructing a permanent operable fish control barrier at the head of Old River to reduce fish movement into south Delta channels. Reclamation and the California Department of Water Resources (DWR) completed environmental studies for Stage 1 activities to construct a fish control barrier and 3 agricultural control barriers, dredging and agricultural intake extensions in the south Delta. Supplemental environmental studies will be completed in the future to address a Stage 2 decision to increase exports and improve water supply reliability.

Current Status: Significant activities conducted in 2007 included interagency coordination with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service, and the California Department of Fish and Game under the Federal and State Endangered Species Acts. Completion of environmental documentation on the preferred physical/structural component continues in 2009. Funding in FY 2009 will support continued coordination and technical support to DWR.

Proposed Actions for FY 2010: Activities will focus on completion of environmental compliance documentation and securing environmental permits for the construction of the SDIP physical/structural components. In FY 2010, the project will move into the final planning, engineering and design before transitioning into the construction phase.

Conveyance Program Supplemental Analysis

Authority: P.L. 108-361, Title I, Section 103 (f)(1)(A); P.L. 108-361, Title I, Section 103 (f)(1)(C); P.L. 108-361, Title I, Section 103 (f)(1)(G); Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (15); and P.L. 108-361, Title I, Section 103 (f)(1)(D)&(E)(ii)

FY 2010 Budget Request (000's): \$500

Project Description: Reclamation will respond to requests by management level reviewers and decision makers for supplemental study analyses, perform those analyses, respond to questions, and coordinate transmittal of the Final Conveyance Program Feasibility Reports.

Current Status: This activity will be initiated upon completion and transmittal of the conveyance feasibility reports and environmental compliance to management level reviewers and decision makers.

Proposed Actions for FY 2010: Supplemental analysis activities will commence at the end of each conveyance study, when each conveyance study is transmitted to the management level reviewers and decision makers.

SCIENCE

Interagency Ecological Program (IEP)

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(1).

FY 2010 Budget Request (000's): \$4,000

Project Description: Continues to support the IEP for the Sacramento-San Joaquin estuary for physical, chemical, and biological monitoring which is required as a condition of the joint Federal-State water export permit (D-1641) and by biological opinions issued under the Endangered Species Act of 1973.

Current Status: The IEP provides a variety of essential data utilized for management and operation of the Central Valley Project and for planning future projects involving Reclamation. Currently the IEP has withdrawn from conducting special studies and limits its endeavors to mandated monitoring of biological, water quality, and hydrological parameters.

Proposed Actions for FY 2010: Funding will be used to conduct mandated monitoring activities. These activities include the operation of delta flow and thermograph stations, the Environmental Monitoring Program, upper estuary zooplankton sampling, the fall midwater trawl and summer townet surveys, estuarine and Bay shrimp monitoring, Delta juvenile salmon monitoring, the Spring Kodiak trawl, larval fish and 20mm delta smelt

surveys and screw trap monitoring for juvenile salmonids at Knights Landing, and Mill and Deer creeks.

Pelagic Organisms Decline (POD)

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(1).

FY 2010 Budget Request (000's): \$2,550

Project Description: Continues to support the ongoing scientific investigation of the decline of native and non-native pelagic fishes in the Sacramento-San Joaquin Estuary. Personnel involved in the investigation include scientists, hydrologists and engineers from the Interagency Ecological Program agencies, CALFED, universities and the National Center for Ecological Analysis and Synthesis.

Current Status: Indices of relative abundance of four species of pelagic fishes in the Sacramento- San Joaquin Estuary continue to be at or near record lows. One species, the delta smelt, is protected under Federal Endangered Species Act and another, the longfin smelt, has been proposed for listing. A number of potential causes of the declines have been identified for further investigation including, but not limited to, the presence of exotic organisms, ammonia discharge from the Sacramento regional wastewater treatment facility, other contaminants/toxic algae and water project operations.

Proposed Actions for FY 2010: Activities will continue to implement recommendations from the POD Synthesis Report, complete follow-up work identified in the synthesis report, and develop adaptive management scenarios. Tasks include field monitoring, laboratory evaluations, special studies, statistical evaluations, mathematic model construction, and program administration.

CALFED Science Activities

Authority: Title XXXIV, H.R. 429, P.L. 102-575, Section 3406 (b)(1).

FY 2010 Budget Request (000's): \$3,000

Project Description: Continues investigation by the Interagency Ecological Program agencies and the CALFED Science Program of the causes and consequences of the recent declines in the relative abundance of pelagic organisms in the Bay-Delta, including the delta smelt, a species listed as threatened under the Endangered Species Act. Also continues expert evaluations and scientific assessments of Program elements and assistance in CALFED agencies efforts to establish performance measures and to monitor and evaluate the performance of all Program elements.

Current Status: Indices of relative abundance of four species of pelagic fishes in the Sacramento- San Joaquin Estuary continue to be at or near record lows. One species, the delta smelt, is protected under Federal Endangered Species Act and another, the longfin

smelt, has been proposed for listing. A number of potential causes of the declines have been identified for further investigation including, but not limited to, the presence of exotic organisms, ammonia discharge from the Sacramento regional wastewater treatment facility, other contaminants/toxic algae and water project operations.

Proposed Actions for FY 2010: Activities will continue to implement recommendations from the POD Synthesis Report, complete follow-up work identified in the synthesis report, and develop adaptive management scenarios. Tasks include field monitoring, laboratory evaluations, special studies, statistical evaluations, mathematic model construction, and program administration.

OVERSIGHT AND COORDINATION

CALFED Program Management, Oversight, and Coordination

Authority: P.L. 108-361, Title I, Section 103 (f)(4)

FY 2010 Budget Request (000's): \$2,000

Project Description: Activities include Program support; Program-wide tracking of schedules, finances, and performance; multi-agency oversight and coordination of Program activities to ensure Program balance and integration; development of interagency crosscut budgets and a comprehensive finance plan to allocate costs in accordance with the beneficiary pays provisions of the Record of Decision; coordination of public outreach and involvement, including tribal, environmental justice, and public advisory activities in accordance with the Federal Advisory Committee Act (5 U.S.C. App.); development of Annual Reports; and Reclamation's administration of the storage, conveyance, water use efficiency, environmental water account, ecosystem restoration, science, and water transfer programs.

FISCAL YEAR 2010

ARMY CORPS OF ENGINEERS

ECOSYSTEM RESTORATION PROGRAM

Hamilton Airfield Wetlands Restoration, CA

Authority: WRDA of 1999, Sec 101(b)(3) and WRDA of 2007, Sec. 3018

FY 2010 Budget Request (000's): \$ 17,900

Project Description: The project includes 988 acres of a former military airfield and adjacent California State Lands Commission areas. The site is located on San Pablo Bay, 4 miles east of the city of Novato, in Marin County, California. The levee-protected site has subsided below the elevation of surrounding properties, including the tidal wetlands immediately adjacent to San Pablo Bay. This wetlands restoration project would advance the beneficial reuse of dredged material from San Francisco Bay as part of the Long Term Management Strategy (LTMS). The California State Coastal Conservancy (Conservancy) is the non-Federal sponsor.

Current Status: Funds are being used to complete site preparation for dredge material placement for one segment. Complete containment levees for seasonal wetland and preparation for receipt of Oakland -50 foot project including the Wildlife Corridor Berm. Material placement will begin this fiscal year.

Key Milestones:

Engineering and Design January/September 2010

ATF Construction Contract January/April 2010

INTEGRATED REGIONAL WATER MANAGEMENT

Coyote Creek and Berryessa Creek, CA

Authority: WRDA 1990, National Defense Authorization Act for Fiscal Year 1994 (directed the Secretary to construct the project notwithstanding Section 902 of Water Resources Development Act of 1986).

FY 2010 Budget Request (000's): \$ 950

Project Description: The recommended project includes offset levees and an overflow channel on Coyote Creek, and two sedimentation basins, concrete lined trapezoidal channel and off-set levees on Berryessa Creek. Provisions are also included for fish and

wildlife mitigation for both Coyote and Berryessa Creeks.

Current Status: Coyote Creek element was completed in Aug 96. Mitigation planting contract was completed in Apr 97, and was followed by a 3-year plant establishment period. Severe flooding has occurred on both Coyote and Berryessa Creeks. In 1983 flooding on Coyote Creek caused over \$6.0 million worth of damages. The Jan 97 flood was the highest recorded flow on Coyote Creek since completion of Anderson Dam in 1950. Although some flooding occurred upstream on Coyote Creek, flooding was averted in the project reach due to completion of the Coyote Creek project element in 1996, which provided for a 100-year level of protection.

In June 2001, the Reevaluation Cost Sharing Agreement (RCSA) was executed between the U.S. Army Corps of Engineers, Sacramento District, and the Santa Clara Valley Water District for a General Reevaluation Report (GRR) analysis of the Berryessa element. The project is cost shared on a 50/50 percent basis. The release of the GRR for public review is scheduled for late FY08, with completion of the report and start of design in early FY09. FY2009 funds will be used to continue design.

Key Milestones:

Public review of GRR August 2008
Completion of GRR October 2008

Napa River, CA

Authority: Flood Control Acts of 1965 & 1976

FY 2010 Budget Request (000's): \$ 39,500

Project Description: The project is located within the city of Napa, CA. A major portion of the City is located within a high flood hazard area, which is continually subject to flooding. The NED Plan, which consists of over-bank excavation, floodwalls, vertical walls, levees, bridges, pumping stations, and flowage easements, would provide a 100-year level of protection from both the Napa River and Napa Creek. This plan also includes recreation trails and incidental restoration.

Current Status: Work completed to date includes: Contract 1A Excavation in Oct 2000; Demolition work for the east side in Sep 2002; Railroad Relocation, including a bridge relocation (Federal responsibility) completed in 2002 by the local sponsor; first phase of Petroleum Remediation along east side of river in Dec 2002 and last phase in Jan 2004; Contract 1B Excavation in Apr 2004; 6th to 3rd Street Excavation in Sep 2005; Duden Excavation in Sep 2005; NSD Excavation in Dec 2006; Contract 2West (Hatt-to-First Street Floodwalls construction) in 2008; design completion (2008) for the Napa Valley Wine Train Relocation. The local sponsor completed the Third Street Bridge Relocation in Sep 2002, the Soscol Bridge Relocation in Jan 2004, and the First Street Bridge Relocation in Jan 2006. Relocation of the Maxwell Bridge was completed in Spring

2006. The sponsor continues with the extensive land acquisition and other utility relocations required for the Napa River Project. There will be at least five additional construction contracts to complete the flood protection features. During FY 2009, funds will be used to continue the Napa Wine Train Railroad Relocation contract.

Key Milestones:

Record of Decision for revised SEIS/EIR issued Jun 99
Project Partnership Agreement executed Feb 00
Napa Valley Wine Train Relocation Construction Contract Award in Sep 2008.
Several contracts completed, including recent Contract 2West (Hatt-to-First Street Reach).

Santa Ana River Mainstem, CA

Authority: WRDA 1986 (PL-99-662), Energy & Water Appropriations Act, 1988 (San Timoteo), WRDA 1990 (Santa Ana Trails), 1996 (Prado Dam, SR 71), WRDA 2007, Sec. 3027, 3033, 3036

FY 2010 Budget Request (000's): \$19,100

Project Description: The project is located along a 75-mile (mi) reach of Santa Ana River in Orange, San Bernardino and Riverside Counties. Plan of improvement: Seven Oaks Dam (145,600 acre-feet), management of overflow area-Seven Oaks to Prado (35 mi); raise Mill Creek levee (2.4 mi); additional storage at Prado (140,600 acre-feet); improvements along: Oak Street Drain/Riverside County (3.6 mi) Santiago Creek/Orange County (1.2 mi), and lower Santa Ana River (31 mi); recreation development; mitigation and preservation; and San Timoteo (5.4 mi).

Current Status: Complete Prado Dam Embankment and Outlet, fully fund the Reach 9 Phase 2 construction, Reach 9 mitigation, continue Seven Oaks mitigation and continue design for Prado Phase II Interior Dikes and the Spillway. During FY 2010, funds will be used to initiate construction for the Reach 9 Phase 2A channel construction.

Key Milestones:

Award Reach 9 Phase 2A construction contract

FISCAL YEAR 2010

USDA NATURAL RESOURCES CONSERVATION SERVICE

Ecosystem Restoration Program

Working Landscapes and Ecosystem Restoration

Authority: Public Law 110-246, The Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) amended Public Law 107-171, Farm Security and Rural Investment Act of 2002 (Environmental Quality Incentive Program Section 1240 of the Food Security Act of 1985 as amended by Section 2301 of Public Law 107-171; Wetlands Reserve Program Section 1237 of Food Security Act of 1985 as amended by Section 2201 of Public Law 107-171); Public Law 74-46, The Soil Conservation and Domestic Allotment Act of 1935 and The Soil and Water Resources Conservation Act of 1977, Conservation Operations.

FY 2010 Budget Request (000's): Included in base budget for Conservation Operations

Project Description: The Natural Resources Conservation Service (NRCS) provides technical assistance for on-farm natural resources conservation activities, including conservation planning through its Conservation Operations authority, and provides technical and financial assistance to agricultural producers to assist with their natural resource concerns through the Environmental Quality Incentive Program. NRCS also provides technical and financial assistance to landowners for qualifying wetland restoration and preservation projects through the Wetlands Reserve Program.

Current Status: NRCS continues to provide Federal leadership for on-farm natural resources conservation activities, and provides technical and financial assistance to agricultural producers to assist with conservation and other natural resource concerns. NRCS works closely with other Federal, State, local, and environmental constituents and partners to coordinate implementation of on-farm conservation activities with the landowner. NRCS implements the Wetlands Reserve Program in partnership with other Federal, State, local, and environmental organizations to maximize the benefits and effectiveness of the program.

Working Landscapes and Ecosystem Restoration Projects

Authority: Public Law 110-246, The Food, Conservation, and Energy Act of 2008 amended Public Law 107-171, Farm Security and Rural Investment Act of 2002 (Environmental Quality Incentive Program (EQIP) Section 1240 of the Food Security Act of 1985 as amended by Section 2301 of Public Law 107-171; Wetlands Reserve Program (WRP) Section 1237 of Food Security Act of 1985 as amended by Section 2201 of Public Law 107-171). The 2008 Farm Bill eliminated the EQIP Ground and Surface Water Conservation program while section 2510 established the Agricultural Water Enhancement Program (AWEP) by amending section 1240I of the Food Security Act of 1985.

FY 2010 Budget Request (000's): EQIP \$10 million estimate based on prior fiscal years and initial county allocations for fiscal year (FY) 2009. WRP's \$3.5 million estimate is based on prior fiscal years actual obligations and initial allocation for FY 2009. Potential amount available from EQIP AWEP is unknown.

Project Description: Implement projects using Environmental Quality Incentive Program (EQIP) incentive payments which complement the objectives contained in the CALFED Ecosystem Restoration Program while focusing on farms. Signups are held at local service centers located in the CALFED solution area. Approved projects will optimize environmental benefits while addressing natural resource concerns and are awarded based on criteria consistent with the performance goals of NRCS' Environmental Quality Incentive Program.

Implement projects using Agricultural Water Enhancement Program (AWEP) funding which complement the water quality objectives contained in the CALFED Ecosystem Restoration Program and the objectives of AWEP. The Interim Final Rule for EQIP was published January 15, 2009 and the Notice of Request for Proposals for the AWEP was published January 14, 2009 with a due date of March 2, 2009. It is anticipated that AWEP will provide funding, but the level of funding is unknown. There is \$61.2 million available in FY 2009 nationwide. EQIP AWEP will be awarded at the national level. Specific actions depend on applications received and awarded funding.

Implement projects using Wetlands Reserve Program (WRP) funding which complement the objectives contained in the CALFED Ecosystem Restoration Program and the objectives of the WRP. The WRP objectives are to achieve the greatest wetland functions and values, along with optimum wildlife habitat, on every acre enrolled in the program. This is done through the enrollment of conservation easements on private lands; restoration and protection of wetlands in agricultural settings; removal of environmentally sensitive, marginal cropland from cultivation; and assistance to landowners for restoration of wetland hydrology which will contribute to the national goal of no net loss of wetlands. Signups are held at local service centers located in the CALFED solution area. Applications are ranked using state-wide ranking criteria. Approved projects optimize environmental benefits while addressing natural resource concerns and are awarded based on their state wide rank consistent with the goals of NRCS' Wetlands Reserve Program.

Current Status: Initial allocations have been received for FY 2009 for EQIP and WRP.

Interim Final Rules for the revised WRP program are out for public comment and there is uncertainty as to the effect of these new program rules on potential eligible applicants. In addition, the current budget situation within the state is limiting the availability of partnership funding from the State for existing approved applications. Should this continue, there will be fewer approved applications than anticipated.

The new EQIP AWEP may represent an additional source of funding because water quality, as well as water quantity, is part of the purpose of the program, but it is not possible to determine a potential funding level as this is the first time this program is being offered.

Water Use Efficiency Program

Water Conservation

Authority: Public Law 110-246, The Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) amended Public Law 107-171, Farm Security and Rural Investment Act of 2002 (Environmental Quality Incentive Program Section 1240 of the Food Security Act of 1985 as amended by Section 2301 of Public Law 107-171; Ground and Surface Water Conservation Section 1240I of the Food Security Act of 1985 as amended by Section 2301 of Public Law 107-171); Public Law 74-46, The Soil Conservation and Domestic Allotment Act of 1935 and The Soil and Water Resources Conservation Act of 1977, Conservation Operations.

FY 2010 Budget Request (000's): Included in base budget for Conservation Operations.

Project Description: NRCS provides technical assistance for on-farm water conservation activities, including conservation planning through its Conservation Operations authority, and provides technical and financial assistance to agricultural producers to assist with water conservation and other natural resource concerns through the Farm Bill authorities.

Current Status: NRCS provides Federal leadership for on-farm water conservation activities, and provides technical and financial assistance to agricultural producers to assist with water conservation and other natural resource concerns. NRCS works closely with other Federal, State, local, and environmental constituents on water conservation issues through the State Technical Committee.

Water Conservation Projects

Authority: Public Law 110-246, The Food, Conservation, and Energy Act of 2008 (2008 Farm Bill) amended Public Law 107-171, Farm Security and Rural Investment Act of 2002 (Section 1240 of the Food Security Act of 1985 as amended by Section 2301 of Public Law 107-171; Ground and Surface Water Conservation Section 1240I of the Food Security Act of 1985 as amended by Section 2301 of Public Law 107-171) by eliminating the EQIP Ground and Surface Water Conservation, while section 2510 established the Agricultural Water Enhancement Program (AWEP) by amending section 1240I of the Food Security Act of 1985.

FY 2010 Budget Request (000's): \$8 million EQIP estimated based on prior fiscal years and initial FY 2009 allocations. Potential amount available from EQIP AWEP is unknown.

Project Description: Since 2002, Ground and Surface Water Conservation (GSWC) provided a special initiative through EQIP for ground and surface water conservation projects. Projects were implemented on-farm using the EQIP Ground and Surface Water Conservation incentive payments which complemented the CALFED Water Use Efficiency program water conservation objectives. Signups were held at local service centers located in the CALFED solution area. Approved projects optimized environmental benefits while addressing natural resource concerns and were awarded based on local ranking criteria consistent with the performance goals of NRCS' EQIP Ground and Surface Water Conservation. Because this program was eliminated, the primary source of funding is expected to be from regular EQIP which also has water conservation as an eligible financial assistance project.

The new Agricultural Water Enhancement Program (AWEP) will continue the complementary program relationship to the CALFED Water Use Efficiency program water conservation objectives. The Interim Final Rule for EQIP was published January 15, 2009 and the Notice of Request for Proposals for the AWEP was published January 14, 2009. It is anticipated that AWEP will provide funding, but the level of funding is unknown. There is \$61.2 million available in FY 2009 nationwide. EQIP AWEP will be awarded at the national level. Specific actions depend on applications received and awarded funding.

Current Status: Initial allocations have been received for FY 2009 for EQIP.

The new EQIP AWEP may represent an additional source of funding because water quantity, as well as water quality, is part of the purpose of the program, but it is not possible to determine a potential funding level as this is the first time this program is being offered. The EQIP GSWC program brought most of the funding for water conservation projects in the CALFED source areas since 2002. Proposals are being accepted for the new AWEP through March 2, 2009. It is anticipated that the level of funding received in FY 2009 through successful proposals will represent a reasonable base-line for several years because these are anticipated to be multi-year contracts directly with producers.

FISCAL YEAR 2010

US GEOLOGICAL SURVEY

SCIENCE

Interagency Ecological Program

Authority: Organic Act of March 3, 1879, as amended (43 U.S.C. 31 et seq.)

FY 2010 Budget Request (000's): \$532

Project Description: In cooperation with other agencies in the Interagency Ecological Program (IEP: US Fish & Wildlife Service, US Bureau of Reclamation, USGS, US Army Corps of Engineers, US Environmental Protection Agency, CA Water Resources Control Board, CA Department of Water Resources, and CA Department of Fish & Game), the USGS is measuring within-Delta salt and water transfers and Delta outflow into the Bay, providing information needed for documenting salt transport mechanisms and managing freshwater flow to meet salinity standards. These studies also include areas in Suisun Marsh and South San Francisco Bay, as well as measuring temperature and suspended sediment at the entrance of the San Joaquin River into the Delta.

Current Status: The hydrodynamic flow and salinity stations funded by the IEP are an integral part of the entire flow network for the Delta. This data from this flow network are used in real-time decisions by water operators to divert water from the Delta to other parts of California (south and parts of the greater San Francisco bay area). More than 25 million Californians drink water originating from the Delta and this water is used to irrigate millions of acres of agricultural lands. The importance of this network also plays a key role in the ongoing attempt at assessing the migration patterns of threatened and endangered fish species in the Delta (salmon, pelagic organisms, etc.), and provides the framework for understanding the physical, chemical and biological interactions in the Delta, necessary information for solving the complex ecological and water supply issues in the Delta.

Related activities include studies of flow and salt transport in the central and south Delta, and Suisun Marsh.

Lead Scientist Oversight

Authority: Organic Act of March 3, 1879, as amended (43 U.S.C. 31 et seq.)

FY 2010 Budget Request (000's): \$701

Project Description: The U.S. Geological Survey provides support for the CALFED Bay-Delta Program's Lead Scientist and staff.

CALFED Bay-Delta Program is a multi-decade, multi-billion dollar cooperative effort of more than 20 State and Federal agencies working to improve the quality and reliability of California's water supplies and revive the San Francisco Bay-Delta ecosystem. The CALFED Science Program, led by the Lead Scientist, is tasked with: providing a comprehensive and integrated scientific context for CALFED activities; ensuring the advance of science needed to guide Bay-Delta decisions and water project operations; establishing a framework to identify and articulate relevant areas of scientific uncertainty; and developing strategies to reduce uncertainties and track progress toward CALFED goals.

The Lead Scientist works with the CALFED Science Program staff, the CALFED Independent Science Board, CALFED implementing agency managers and scientists, and the scientific community at large to promote the use of peer-reviewed science throughout the CALFED Program. The Lead Scientist identifies, refines and implements the science agenda for the CALFED Program.

The Lead Scientist has oversight responsibility to ensure that CALFED studies are relevant, authoritative and objective and that they progressively reduce uncertainties about critical issues, add to the knowledge that aids water management and ecosystem restoration, and help prepare for future uncertainties. The Lead Scientist communicates new findings and current scientific understandings to the CALFED agency managers, stakeholders, scientific community and the public.

Current Status: The Lead Scientist and Staff are in place.

Place-based study of SF Bay

Authority: Organic Act of March 3, 1879, as amended (43 U.S.C. 31 et seq.)

FY 2010 Budget Request (000's): \$1.237

Project Description: The mission of Place Based Studies, now called Priority Ecosystem Science (PES), is to provide science in support of adaptive management of ecosystems that have near-term societal concern and significant long-term societal value. These studies are designed to serve local ecosystem management needs and to provide transferable knowledge and approaches. PES efforts focus in areas where new integrated science approaches can be developed to address the needs of a diverse group of decision-makers. Activities require collaboration and integration of expertise to achieve a system-scale understanding of the natural and anthropogenic factors affecting ecosystems and to better understand the interactive nature of resources and the environment.

Current Status: Current studies cover a range of activities from the Delta through Suisun Bay to the Golden Gate dealing with hydrodynamic processes, sediment budgets, and salt transport. The information and knowledge produced is integral to the developing

understanding of wetland management, salt pond reclamation, salinity control and fish movements within and through the Delta.

Sacramento Basin National Water Quality Assessment (NAWOA)

Authority: Organic Act of March 3, 1879, as amended (43 U.S.C. 31 et seq.)

FY 2010 Budget Request (000's): \$183

Project Description: The National Water-Quality Assessment (NAWQA) Sacramento Basin Program is designed to assess the status and trends of water quality in the basin, and to understand the factors that affect it. Specifically, the Program goals are to characterize the condition of streams and ground water in the basin, evaluate how the water quality is changing over time, and to identify how natural features and human activities affect the quality of streams and ground water. The NAWQA Program is a long-term cyclical study that began in 1991.

Current Status: The Sacramento Basin Program has completed the first cycle, and is preparing for its second cycle. Recent activity has focused on the evaluation of Dissolved Organic Carbon (DOC) transported by the Sacramento River into the Delta and its effects on drinking water quality. The CALFED Drinking Water Program needs information on DOC concentrations and loads to the Delta. This project will provide critical information on the long-term trends in carbon loading and will improve the accuracy of flow measurements from the upstream sources.

San Joaquin Basin National Water Quality Assessment (NAWOA)

Authority: Organic Act of March 3, 1879, as amended (43 U.S.C. 31 et seq.)

FY 2010 Budget Request (000's): \$584

Project Description: The National Water-Quality Assessment (NAWQA) San Joaquin Basin Program is designed to assess the status and trends of water quality in the basin, and to understand the factors that affect it. Specifically, the Program goals are to characterize the condition of streams and ground water in the basin, evaluate how the water quality is changing over time, and to identify how natural features and human activities affect the quality of streams and ground water. The NAWQA Program is a long-term cyclical study that began in 1991.

The San Joaquin Basin National Water Quality Assessment is a long-term Program, and is one of 42 nationwide. Cycle 1 (Water Quality Status) started in 1991, and was completed in 2001. Cycle 2 (Water Quality Trends and Understanding) began in 2001, and is scheduled to end in 2011.

In the second cycle, efforts now in process focus on five major activities:

(1) Status assessment of mercury; (2) Status assessment of ground-water drinking water sources; (3) Assessment of water-quality trends in streams and ground water; (4) Topical study of transport of anthropogenic and natural contaminants to community supply wells; (5) Topical study of agricultural chemicals: sources, transport and fate.

Current Status: The San Joaquin-Tulare Basin Program is in its second study cycle, and is one of five areas nationwide participating in an intensive study of the sources, transport, and fate of agricultural chemicals in relatively small agricultural watersheds. The primary goal of these studies is to estimate a mass balance for water and chemicals. To achieve this goal, all compartments of the hydrologic cycle have been monitored. These compartments include the atmosphere, surface runoff, vadose zone, and ground water. In addition, ground-water processes along a flowpath, and interactions between ground water and surface water at the toe of the flowpath have been monitored. The San Joaquin site is located within the Merced River Basin on the east side of the valley. The objective is to apply the information and understanding gained in this intensive study to larger areas, which in this case includes the Sacramento-San Joaquin River Delta.

Toxics Substances Hydrology Program

Authority: Organic Act of March 3, 1879, as amended (43 U.S.C. 31 et seq.)

FY 2010 Budget Request (000's): \$492

Project Description: The San Francisco Bay-Estuary Toxic Substances Hydrology (Toxics) Program is an ongoing, long-term estuarine study designed to quantitatively define the processes that affect contaminant transport and distribution in the San Francisco Bay estuary. It is part of the national Toxic Substances Hydrology Program. The goal is to create the scientific foundation from which specific, management-oriented problems may be addressed.

The U.S. Geological Survey (USGS) Toxic Substances Hydrology (Toxics) Program was initiated in 1982 to provide objective and reliable scientific information needed to develop policies and practices that help avoid exposure to toxic substances, mitigate environmental deterioration from contaminants, provide cost-effective cleanup and waste-disposal strategies, and reduce future risk of contamination.

San Francisco Bay receives a broad range of organic and inorganic contaminants that vary widely in their sources, seasonality, toxicity, and environmental behavior. Despite an increasing awareness of potential problems, the effects of organic contaminants in the estuarine environment are not well understood. Since 1991, the USGS has been studying the fate and effects of these contaminants in San Francisco Bay as part of the Toxic Substances Hydrology Program. This study is referenced as the San Francisco Bay Toxics Project.

The San Francisco Bay-Estuary Toxic Substances Hydrology (Toxics) Study is unique among estuarine studies in its long-term approach to quantitatively defining the processes that affect contaminant transport and distribution in major urbanized estuaries. These studies create the scientific foundation from which specific, management oriented problems may be addressed. The necessary balance between maintaining this scientific foundation and responding effectively to critical management issues is demonstrated by the complementary nature of Toxics and USGS Place-based studies in San Francisco Bay.

Current Status: The Toxics Program is supporting the development of sediment-transport, and two- and three-dimensional numerical models that build on our present knowledge to better understand the occurrence and effects of pesticides and related toxics on sensitive fish species in the Delta and Bay. In combination with other USGS scientific programs in the San Francisco Bay/Delta system, this Program provides water-resource regional managers and the general public with scientific information that describes relationships among flow, circulation, contaminant distribution and effects, and habitat alteration.

FISCAL YEAR 2010

US FISH AND WILDLIFE SERVICE

ECOSYSTEM RESTORATION

ERP Administration

Authority: Central Valley Project Improvement Act, PL. 102-575 § 3406; CALFED Bay-Delta Authorization Act, PL 108-361; Fish and Wildlife Coordination Act, 16 U.S.C. 661-667(e)

FY 2010 Budget Request: \$ 1,232,000

Project Description: The Service, as an Ecosystem Restoration Program (ERP) implementing agency, takes a leadership role in ERP planning efforts—in collaboration with the National Marine Fisheries Service (NMFS), California Department of Fish and Game (CDFG) and California Bay-Delta Authority (CBDA). Comprehensive efforts are currently underway to finalize the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) species life-history and ecosystem conceptual models and to use these models for the scientific evaluation of restoration actions in the San Francisco Bay-Delta watershed. The DRERIP scientific evaluation process is being applied to multi-agency efforts to develop and implement restoration actions and to restore the ecological function in the San Francisco Bay Delta, while working with stakeholders in a manner responsive to their concerns.

The Service is collaborating on the preparation of an ERP Conservation Strategy for Stage 2 Implementation and is coordinating with stakeholders to ensure that conservation strategies prepared under other authorities are consistent with the ERP conservation strategy.

Under the CALFED Bay-Delta Authorization Act, the Service is charged with coordinating and tracking all ecosystem restoration actions using federal funds under the CALFED program. The Service tracks schedules, finances, and performance; coordinates Program activities to ensure Program balance and integration; and coordinates public outreach and involvement, including tribal, environmental justice, and public advisory activities in accordance with the Federal Advisory Committee Act.

The Service, through an interagency process, coordinates and collaborates on Action Specific Implementation Plans (ASIP) for all CALFED projects in order to meet the requirement of the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), and California's Natural Communities Conservation Planning Act (NCCPA).

Current Status: The Service, as an ERP implementing agency, will continue ERP planning efforts in collaboration with NMFS, CDFG and CBDA. The Service will continue to participate in the DRERIP scientific evaluation process for conservation and restoration actions within the San Francisco Bay-Delta watershed. The Service is in the process of finalizing and publishing the existing draft DRERIP conceptual models and is continuing to shepherd new models through the scientific peer review and collegial review processes. The Service is tracking schedules, finances, and performance; coordinating program activities to ensure Program balance and integration; and coordinating public outreach and involvement, including tribal, environmental justice, and public advisory activities in accordance with the Federal Advisory Committee Act. The Service, through an interagency process, is highly involved in streamlining the ASIP process and in preparation of ASIPs for all CALFED projects in order to meet the requirement of FESA, CESA, and NCCPA. In FY09, the Service is participating in development of an ASIP for the Shasta Lake Water Resources Investigation.

In January 2006, a Statement of Principles was negotiated by State and Federal agencies and stakeholders involved in the CALFED process. It serves as the foundation for an agreement for (1) development of one or more Bay-Delta Conservation Plans (BDCPs) and (2) implementation of key water quality, near-term water supply, ecosystem, and levee actions, subject to compliance with applicable environmental review under the National Environmental Policy Act and the California Environmental Quality Act. The Statement of Principles intends for the BDCPs to ensure implementation of actions that will adequately conserve and assist in the recovery of fish and wildlife affected by covered activities, and to provide long-term assurances related to implementation and operation of designated water and power related projects and other associated activities described in the BDCPs.

Key Milestones: On December 31, 2007, the ERP implementing agencies completed a comprehensive assessment of the overall status of the ERP towards achieving the 119 implementation milestones identified in the Federal programmatic biological opinions and State Natural Community Conservation Plan Approval for the CALFED Program (Ecosystem Restoration Program End of Stage 1 Compliance Report: Assessing Progress Towards Milestones and the Efficacy of the Environmental Water Account). The milestones, developed primarily from targets or actions in the ERP Plan and Water Quality Program Plan, were those actions the fish and wildlife agencies expected would be implemented during Stage 1 (the first seven years of the 30-year CALFED program) to achieve CALFED's conservation goals. This assessment found that progress on nearly 80 percent of the milestones was on or ahead of schedule. This progress was sufficient to allow the state and federal regulatory agencies to continue coverage under FESA, CESA, and NCCPA for the entire CALFED Program, and contributed to continuance of their program-level commitments.

In 2008 the ERP prepared a draft Conservation Strategy to provide the ERP agencies' views for activities of CALFED and other programs in the Bay-Delta region following Stage 1, such as the Bay-Delta Conservation Plan, Delta Vision, and Delta Risk Management Strategy. The draft ERP Conservation Strategy summarizes integration

with other programs and provides critical guidance on the development of a robust conservation strategy (such as viable populations, an analytical framework, and monitoring and performance measures). The milestones report and Conservation Strategy will be completed in 2009.

In 2008, the Service coordinated and completed both peer review and collegial review on the DRERIP species life-history conceptual models for seven species and four salmon runs. The Service assisted in the preparation and finalization of ecosystem conceptual models and began coordinating on the preparation of integrative models. In 2009, the conceptual models will be refined and published, and the DRERIP scientific evaluation process will be used for evaluating restoration actions and conservation strategies, including ERP restoration actions, conservation measures developed for the BDCP, the ERP Conservation Strategy, and the BDCP Conservation Strategy.

Central Valley Joint Venture

Authority: North American Waterfowl Management Plan 1986

FY 2010 Budget Request: \$600,000:

Project Description: The Central Valley Joint Venture (CVJV), one of eighteen North American Joint Ventures in the United States, is a public-private partnership of 22 agencies, conservation organizations, and one corporation. The CVJV mission is to work collaboratively through diverse partnerships to protect restore and enhance wetlands and associated habitats for waterfowl, shorebirds, waterbirds, and riparian songbirds, in accordance with biological based conservation actions identified in its Implementation Plan.

Current Status: The Joint Venture partners are working toward achieving the stated goals of its 2006 implementation plan, which includes goals for the conservation of breeding and wintering waterfowl, breeding and wintering shorebirds, riparian birds, and waterbirds. In FY 2008, the Joint Venture Partners restored, enhanced, or protected 86,000 acres in wetlands and associated uplands. It is expected that these acreage numbers will increase about 3 to 5 percent annually in FY 2009 and FY 2010.

Key Objectives and Strategies for 2007 through 2011:

- Restore 108,527 acres of seasonal wetlands
- Enhance 23,884 acres of seasonal wetlands
- Restore 12,500 acres of semi-permanent wetlands
- Restore 10,000 acres of riparian habitat
- Enhance 477,000 acres of waterfowl-friendly agricultural crops
- Protect all unprotected seasonal wetlands with fee or conservation easements
- Secure full water supplies for Central Valley State and Federal refuges

Cooperative Endangered Species Conservation Fund

Authority: Endangered Species Act of 1973, 16 U.S.C 1361 et seq., as amended; Department of the Interior Appropriations, P.L.107-63.

FY 2010 Budget Request (000's): \$ TBD

Project Description: The Cooperative Endangered Species Conservation Fund (CESCF) (Section 6 of the Endangered Species Act) provides funding to States and Territories for species and habitat conservation actions on non-Federal lands. States and Territories must contribute a minimum non-Federal match of 25% for the estimated program costs of approved projects, or 10% when two or more States or Territories implement a joint project. A State or Territory must currently have, or enter into a cooperative agreement with the U.S. Fish and Wildlife Service (Service) to receive grant funds.

Four grant programs are available through the CESCF, they include the "Traditional" Conservation Grants and the "Nontraditional" Habitat Conservation Plan (HCP) Land Acquisition, HCP Planning Assistance, and Recovery Land Acquisition Grants. Traditional conservation grants are based on a formula driven award. The Recovery Land Acquisition grants are awarded based on a regional competition, whereas the HCP Land Acquisition and Planning Assistance grants are awarded based on a national competition.

Current Status: In FY 2008, we provided a \$300,000 grant to assist in the development of a Bay/Delta Conservation Plan. The counties of Butte, Fresno, and Yuba/Sutter received \$378,600, \$199,800, and \$360,696, respectively. Contra Costa County received a \$6,000,000 grant for land acquisition. Grants will be awarded in FY09 and FY10 as appropriate based on regional and national competitions and program criteria and amounts awarded may differ substantially from FY08 awards.

Endangered Species Recovery Program Funds

Authority: Endangered Species Act of 1973, 16 U.S.C 1361 et seq., as amended

FY 2010 Budget Request (000's): \$ TBD

Project Description: The Recovery Program's objective is to remove federally threatened and endangered species from the endangered species list or to downlist them from an endangered status to a threatened status. This objective is accomplished in three ways: 1) through the development of comprehensive species-specific or ecosystem-specific recovery plans; 2) through the implementation of actions outlined in the recovery plans; and 3) through the issuance of section 10(a)(1)(A) recovery permits for the enhancement and survival of each species.

Current Status: The program is currently in the process of completing four recovery plans. Plans currently under development include a final draft plan for the giant garter

snake, a second draft plan for Chaparral communities in the east SF Bay area, a draft plan for the Delta smelt, and a draft tidal marsh recovery plan for northern and central California.

The Recovery Program continues an annual schedule of writing 5-year reviews of listed species found within the jurisdiction of the Sacramento Fish and Wildlife Office. Twenty 5-year reviews were published in 2007 for the Chinese Camp Brodiaea, Lange's metalmark butterfly, Keck's checker-mallow, showy Indian clover, Antioch Dunes evening primrose, Colusa grass, Butte County meadowfoam, few-flowered Navarretia, Sacramento Orcutt grass, Mariposa pussypaws, California freshwater shrimp, Hartweg's golden sunburst, San Joaquin adobe sunburst, Greene's Tuctoria, Red Hills Vervain, Contra Costa wallflower, Burke's goldfields, Contra Costa goldfields, Sebastopol meadowfoam, and Sonoma sunshine.

In addition to recovery planning, numerous on-the-ground recovery actions are on-going, or have been completed. For example, several habitat creation and/or restoration projects are on-going or completed for the San Francisco garter snake and California red-legged frog, including a partnership with the San Francisco International Airport; full-scale captive propagation and reintroduction programs for the riparian brush rabbit and the Lange's metalmark butterfly; planning for reintroductions of the Mission blue butterfly; outplanting of three endangered plants, Antioch Dunes evening primrose, the Contra Costa wallflower, and Baker's larkspur; restoration of dune habitat at Antioch Dunes National Wildlife Refuge; habitat restoration for the riparian brush rabbit and giant garter snake; protection of remaining populations of Shasta crayfish; reintroduction of *Suaeda californica* to locations around SF Bay; and numerous projects involving seed collection, storage, reintroduction, and research for numerous listed plant species.

The Sacramento Fish and Wildlife Office received \$2,188,168 for the Endangered Species Recovery Program in FY08. The level of Endangered Species recovery program funds obligated to projects are based on two factors: availability of funds and project proposals. Project selection is competitive and the level awarded varies annually; thus, funding amounts and locations of future projects cannot be projected based on outcomes in prior years.

Key Milestones:

- Draft tidal marsh recovery plan to be published by Summer 2009
- Giant garter snake second draft recovery plan to be published in 2009
- More riparian brush rabbits will be released in 2009

Partners for Fish and Wildlife

Authority: Fish and Wildlife Coordination Act, 16 U.S.C. 661, 16 U.S.C. 742a-j, 16 U.S.C. 3741

FY 2010 Budget Request: \$ TBD

The Partners for Fish and Wildlife is a voluntary partnership program that assists private landowners in restoring wetlands and other important fish and wildlife habitat on their lands. Given that it is a voluntary program, the success and the level of effort rely on the private landowner's willingness to accept technical and financial assistance from the Service. Projects for FY 2010 have not been selected and, therefore, future amounts to be expended and planned actions are undetermined at this time.

Project Description: The Partners for Fish and Wildlife program is the Service's primary mechanism for delivering voluntary on-the-ground habitat improvement projects on private lands for the benefit of Federal trust species. It provides technical and financial assistance to landowners to help meet the habitat needs of Federal trust species on private lands. Program projects may include improving habitat for any or all of the following: migratory bird species; anadromous fish species of special concern to the Service; endangered, threatened, or candidate species; species proposed for listing; and other declining or imperiled species.

Current Status: In FY 2009, the program is implementing "Initiative Areas" that will enable the Service to focus its efforts in critical watersheds and threatened landscapes in the Region. In those areas, Partners for Fish and Wildlife will focus on the restoration and enhancement of wetlands, riparian areas, native uplands, habitats for threatened and endangered species, and the elimination of invasive plants. The program will also provide technical assistance to landowners seeking assistance with restoration or enhancement projects.

Since 1990, Partners for Fish and Wildlife in California has restored or enhanced 134,158 acres of wetland habitats, 50,333 acres of upland habitats, 1,998 acres of riparian habitats, 357 miles of riparian habitats, and 310 miles of instream habitats improved for aquatic species on 902 properties. Projections for conservation in FY 2009 are provided under *Key Milestones*.

Key Milestones (based on GRPA goals for 2009):

- Restore 2,700 acres of wetlands in the Central Valley and Central Coast.
- Restore 10 miles of riparian habitats in the Central Valley and Central Coast.
- Restore 20 miles of instream habitat for salmon and steelhead by removing fish barriers from Central Valley and Pacific Coast waterways
- Provide technical assistance to 600 landowners annually.

Land Acquisition

Authority: Migratory Bird Conservation Act, The Fish and Wildlife Act of 1956 (16 U.S.C. 742a-742j), The Endangered Species Act of 1973, as amended (PL 93-205), The Migratory Bird Hunting and Conservation Stamp Act (16 U.S.C. 718-718j, 48 Stat. 452), The Refuge Recreation Act of 1962 (87-714), The Refuge Recreation Act of 1962 (87-

714), The Emergency Wetlands Resources Act of 1986 (PL. 99-645), Land and Water Conservation Fund (16 USC 4601 - 4601-11).

FY 2010 Budget Request: \$TBD

Project Description: The objective is acquiring property, either in fee title or through perpetual conservation easements, for wildlife habitat protection, restoration or enhancement benefits within the National Wildlife Refuge System. The program is administered by USFWS Realty staff within approved project boundaries, in cooperation with refuge staff personnel. In addition to land acquisition, program responsibilities include land exchanges, rights-of-way, relocations, and revenue sharing.

Current Status: In FY 2009, this program will continue to seek out willing sellers within approved refuge acquisition boundaries, concentrating on perpetual conservation easements. This program works with the U.S. Fish and Wildlife Division of Realty, who coordinates with willing sellers and local governments.

Within the Central Valley in the past 25 years, over 100,000 acres of private managed wetland habitat has been protected by conservation easements. Several existing refuges have had lands acquired in fee and added to current acreage, many with listed species as the focus. The Service currently is seeking to acquire perpetual conservation easements within the approved land acquisition boundaries of the Grasslands WMA, North Central Valley WMA, Willow Creek-Lurline WMA, and Tulare Basin WMA. Since its inception, over \$15,000,000 in CALFED monies has been used to acquire several thousand acres in fee and easements throughout the Central Valley. Within the current fiscal cycle, we plan to use various funding sources to acquire approximately 2,000 acres of wildlife habitat at an estimated cost of \$4,500,000.

North American Wetlands Conservation Fund (NAWCF)

Authority: North American Wetlands Conservation Act of 1989 (PL. 101-233)

FY 2010 Budget Request (000's): \$ TBD

The North American Wetlands Conservation Fund is a competitive grant program that does not have a set-aside for CALFED. Five proposals were awarded in FY 2008, each receiving \$1 million of Federal funding with at least a 2:1 non-federal match : (1) North San Joaquin Valley Wetland Habitat Project Phase III, (2) Yolo and Delta Basins Wetland Restoration and Enhancement Phase II, (3) American and Sutter Basins Wetlands Project, (4) Grasslands VI, Sno-bird Unit, (5) North Sacramento Valley Wetland Habitat Project Phase 3.

Project Description: The North American Wetlands Conservation Act (Act) of 1989 provides matching grants to organizations and individuals who have developed partnerships to carry out wetlands conservation projects in the United States, Canada, and Mexico. The Act was passed, in part, to support activities under the North American

Waterfowl Management Plan, an international agreement that provides a strategy for the long-term protection of wetlands and associated uplands habitats needed by waterfowl and other migratory birds in North America. In December 2002, Congress reauthorized appropriations for the Act through Fiscal Year (FY) 2007, reflecting it's and the public's support of the Act's goals. Congress has subsequently increased the appropriation authorization to \$75 million through 2012. Actual annual appropriations are usually in the \$40-\$45 million range, nationally.

Current Status: The North American Wetlands Conservation Act established the North American Wetlands Conservation Act Council to review and recommend project proposals to the Migratory Bird Conservation Commission (MBCC), which has the authority to approve funding for projects. The Council meets three times each year.

The above listed projects were selected for funding by the MBCC in FY08 and work is underway. An estimated \$4 million in grant funding will be awarded to Central Valley projects in FY09.

SCIENCE

Interagency Ecological Program

Authority: Fish and Wildlife Coordination Act, 16 U.S.C. 661-667(e)

FY 2010 Budget Request: \$ TBD

Project Description: The Interagency Ecological Program (IEP) is an estuarine ecological monitoring and special study collaboration by three state and six federal agencies with management and/or regulatory responsibilities in the San Francisco Estuary and Sacramento-San Joaquin Delta, California. The three state agencies are the California Department of Fish and Game (DFG), California Department of Water Resource (DWR), and California State Water Resource Control Board (SWRCB); the federal agencies include U.S. Fish and Wildlife Service (USFWS), U.S. Bureau of Reclamation (USBR), National Ocean and Atmospheric Administration Fisheries (NOAA Fisheries), U.S. Geological Survey (USGS), U.S. Environmental Protection Agency (USEPA), and the U.S. Army Corps of Engineers (USACE). The purpose of this collaboration is to gather in an efficient, coordinated and cooperative way the ecological information required by the agencies to effectively carry out their management and regulatory responsibilities.

The goals and objectives to address the mission of the IEP are (1) describe the status and trends of aquatic ecological factors of interest in the estuary; (2) develop an understanding of environmental factors that influence observed aquatic ecological status and trends; (3) use knowledge of the previous information in a collaboration process to support natural resource planning, management, and regulatory activities in the estuary; (4) continually reassess and enhance long-term monitoring and research activities that

demonstrate scientific excellence; (5) provide scientific information about the estuary that is accurate, accessible, reliable, and timely; and (6) respond to management needs in a timely fashion.

Current Status: The Interagency Ecological Program is comprised of long-term monitoring, water operations monitoring and special studies. The IEP is committed to conducting the mandated monitoring studies required by NOAA Fisheries and FWS biological opinions and SWRCB Water Rights Decision D-1641. There is also a commitment to continue providing the “real-time” data needed to make water operation decisions. Work to be done includes:

- Providing funding is available, implementing coded-wire tagging of all CNFH late-fall run production to ensure proper race identification during subsequent recovery of fish at Delta export facilities and in juvenile and adult sampling programs. Recovery of tagged late-fall run fish is also part of the spring-run recovery plan.
- Sampling juvenile salmon and other delta fishes with midwater trawls, Kodiak trawls and beach seines in the delta that supports or provides information useful to water project operations. Distribution and abundance of juvenile salmonids are required by NOAA Fisheries OCAP BO for winter-run and spring-run Chinook salmon.
- Trawling and seining at key sites in the lower rivers, Delta and estuary targeting all races of juvenile salmon emigrating through, and rearing in the Delta. The program is multipurpose, providing information on the timing of emigration extent of rearing in the Delta, and annual production. Although this effort focuses on juvenile salmon, information is also collected on all other delta fishes. Distribution and abundance of juvenile salmonids are required by NOAA Fisheries OCAP BO for winter-run and spring-run Chinook salmon.
- Studying pelagic organism decline (POD) and Delta smelt. As part of the POD investigations we are providing statistical analysis and biological expertise in determining the cause of the decline and potential actions to mitigate these losses. We are working closely with other IEP agencies and the UC Santa Barbara, National Center for Ecological Analysis to get a broad look at factors affecting delta smelt and other aquatic organisms in the bay and delta.
- Continuing experimentation and monitoring of juvenile salmon (smolt and fry) survival through the Delta. As technologies improve and high tech fish tracking and monitoring systems become more readily available and reliable we are working with our partners to implement these types of sampling gears into our survival studies. We have taken and will continue to take a more active role in acoustic tagging and monitoring studies in addition to our traditional coded wire tag studies.
- Mitten crab monitoring and reporting. This element will operate the online reporting system for mitten crab collections and observations and will implement summer surveys of mitten crab distribution and abundance. The main part of this element will be funded and staffed by USFWS nonnative invasive species program personnel with some sharing of resources from IEP.

Key Milestones:

- We sample salmon, steelhead trout and delta smelt distribution and abundance, record water quality measurements, and provide data on a “real-time” basis to make day-to-day water operations decisions during Data Assessment Team (DAT) conference calls and Water Operations Management Team (WOMT) meetings. Fish samples from this activity support genetic analyses to differentiate Chinook salmon runs and support the collection and processing of fish that are marked with coded-wire tags to help estimate fish survival. Mark/recapture salmon studies will continue in the future but we are transitioning to acoustic tags instead of traditional coded wire tags.
- Monitoring and reporting of mitten crab abundance and distribution is an ongoing long-term project that will continue in FY 2010, and is expected to continue in future years, given sufficient funding.

FISCAL YEAR 2010

National Oceanic and Atmospheric Administration

ECOSYSTEM RESTORATION PROGRAM

Ecosystem Restoration Program (ERP) Oversight & Coordination

Authority: Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), Magnuson-Steven Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.)

FY 2010 Budget Request (000'): \$ 150

Project Description: As an Ecosystem Restoration Program (ERP) implementing agency, the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration in the U.S. Department of Commerce (NOAA Fisheries) will continue ERP planning efforts in collaboration with the U.S. Fish and Wildlife Service (FWS), the California Department of Fish and Game (CDFG) and the California Bay-Delta Authority (CBDA). Activities include program planning and implementation, tracking schedules, finances, and performance; coordination of Program activities to ensure Program balance and integration with other CALFED Programs; coordination of public outreach and involvement, including tribal, environmental justice, and public advisory activities in accordance with the Federal Advisory Committee Act. NOAA Fisheries, through an interagency process, is also involved in planning and developing the format and guidelines for preparing Action Specific Implementation Plans (ASIP) for all CALFED projects in order to meet the requirement of FESA, CESA, and NCCPA.

Current Status: NOAA Fisheries will continue management-level participation in CALFED and CBDA coordination meetings, continue work on multi-year planning documents, work on defining and streamlining the ASIP, participate in developing the Delta Regional Ecosystem Implementation Plan, the South Delta Improvements Package, and the Proposal Solicitation Process (PSP), and serve on annual PSP selection panels to review and fund specific projects in the CALFED program. Staff and Management participate in quarterly ERP Science Board meetings to assist coordination of implementation and integration the ERP program overall in meeting CALFED goals and objectives.

Screen Engineering and Review

Authority: Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), Magnuson-Steven Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.).

FY 2009 Budget Request (000's): \$75

Project Description: Activities include technical review and comment of proposed projects under the Anadromous Fish Screen Program (AFSP). The AFSP is to protect juvenile chinook salmon (all runs), steelhead trout, green and white sturgeon, striped bass and American shad from entrainment at priority diversions throughout the Central Valley. Section 3406(b)(21) of the Central Valley Project Improvement Act (CVPIA) requires the Secretary of the Interior to assist the State of California in developing and implementing measures to avoid losses of juvenile anadromous fish resulting from unscreened or inadequately screened diversions on the Sacramento and San Joaquin Rivers, their tributaries, the Delta, and the Suisun Marsh. Additionally, all AFSP projects meet Goal 3 of the CALFED Ecosystem Restoration Program's (ERP) Draft Stage 1 Implementation Plan (8/1/01, Page 22) which states that "the goal is to maintain and/or enhance populations of selected species for sustainable commercial and recreational harvest, consistent with the other ERP Strategic Goals."

Current Status: Efforts in this program element have scaled down over the past couple of years due to decreased emphasis on screening diversions and greater emphasis on habitat restoration by the ERP program in general. In addition funding for the AFSP has been reduced, resulting in fewer projects in the planning and/or implementation phase. However, staff will continue to review CALFED-funded fish screens and improvement projects as they develop for compliance with section 7 of the Endangered Species Act and existing biological opinions. Specific issues for program staff include reviewing the State Water Project and Central Valley Project Fish Collection Facilities in the Delta. Staff participates on the Tracy Technical Advisory Team, South Delta Fish Facility Forum, and Central Valley Fish Facility Team, all of which are involved in developing new ways to salvage fish from water and debris and return them unharmed to the Delta. Staff reviews and comments on fish studies, research projects, facility evaluations, and operations and maintenance of the Delta fish facilities for compliance with current biological opinions.

Many of the research projects are funded by either CVPIA or CALFED. Staff works with our engineers in Santa Rosa and at the Bureau of Reclamation to approve CVPIA funded fish screen projects. In the past NOAA Fisheries has had 3-4 biologists and engineers working almost full time on these projects. Current staffing is one engineer part-time in support of this program element. In the future there are studies and screen improvements required in the OCAP biological opinion that will have to be evaluated and commented on with respect to listed fish concern.

ENVIRONMENTAL WATER ACCOUNT

EWA Program Oversight & Coordination

Authority: Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)

FY 2010 Budget Request (000's): \$ 75

Project Description: Five Federal and State agencies administer the EWA. The California Department of Water Resources (DWR) and the Bureau of Reclamation (Reclamation), or the "Project Agencies," are responsible for acquiring water assets and for storing and conveying the assets through use of the SWP and CVP facilities. The "Management Agencies," which include the State and Federal fishery agencies (NOAA Fisheries, FWS, and CDFG), use the EWA to protect and restore fish. All five EWA agencies are responsible for the day-to-day program management of actions taken to protect and benefit fish (*e.g.*, pumping reductions to protect fish) and in stream flow enhancements to help facilitate fish population recovery.

Current Status: The EWA program, as it is being implemented incorporates functionally equivalent purchases and actions within the framework of the CALFED ROD and EWA Operating Principles Agreement. Ongoing actions in FY 2010 include using staff expertise on the Central Valley Project and State Water Project to assess operational impacts on juvenile or adult migrating listed winter-run and spring-run Chinook and steelhead.

SCIENCE

Interagency Ecological Program

Authority: Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)

FY 2010 Budget Request (000's): \$ 75

Project Description: The Interagency Ecological Program (IEP) is an estuarine ecological monitoring and special study collaboration by 3 state and 6 federal agencies with management and/or regulatory responsibilities in the San Francisco Estuary and Sacramento-San Joaquin Delta, California. The 3 state agencies are the CDFG, DWR, and California State Water Resource Control Board (SWRCB); the federal agencies include FWS, US Bureau of Reclamation (USBR), National Oceanic and Atmospheric Administration, US Geological Survey (USGS), US Environmental Protection Agency (USEPA), and the US Army Corps of Engineers (USACE). The purpose of this collaboration is to gather in an efficient, coordinated and cooperative way the ecological information required by the agencies to effectively carry out their management and regulatory responsibilities.

The goals and objectives to address the mission of the IEP are (1) describe the status and trends of aquatic ecological factors of interest in the estuary; (2) develop an understanding of environmental factors that influence observed aquatic ecological status and trends; (3) use knowledge of the previous information in a collaboration process to support natural resource planning, management, and regulatory activities in the estuary; (4) continually reassess and enhance long-term monitoring and research activities that

demonstrate scientific excellence; (5) provide scientific information about the estuary that is accurate, accessible, reliable, and timely; and (6) respond to management needs in a timely fashion.

Current Status: The Interagency Ecological Program is comprised of long-term monitoring, water operations monitoring and special studies. The IEP is committed to conducting the mandated monitoring studies required by NOAA Fisheries and FWS biological opinions and SWRCB Water Rights Decision D-1641. There is also a commitment to continue providing the “real-time” data needed to make water operation decisions.

OVERSIGHT & COORDINATION

General Oversight and Coordination

Authority: Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)

FY 2010 Budget Request (000's): \$ 150

Project Description: Activities include participation at CALFED agency coordination meetings, Bay-Delta Public Advisory Committee meetings, California Bay-Delta Authority meetings, input into the development of and review of CALFED program plans, crosscut budgets, and annual reports.

Current Status: NOAA Fisheries is coordinating with other CALFED agencies during the development of the Delta Vision Strategic Plan, a product of the Governor’s Delta Vision Blue Ribbon Task Force. This coordination has focused on identifying existing governance structures and opportunities for integrating CALFED, Delta Vision implementation, and other planning efforts that are underway in the Delta.