

BUDGET The United States Department of the Interior JUSTIFICATIONS

and Performance Information Fiscal Year 2017

BUREAU OF RECLAMATION

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GENERAL STATEMENT BUREAU OF RECLAMATION BUDGET JUSTIFICATIONS - FY 2017

Introduction

Reclamation's fiscal year (FY) 2017 Budget sustains Reclamation's efforts to deliver water and generate hydropower, consistent with applicable State and Federal law, in an environmentally responsible and cost-efficient manner. It also supports the Administration's and Department of the Interior's (Department) priorities to ensure healthy watersheds and sustainable, secure water supplies; build a landscape-level understanding of our resources; celebrate and enhance America's great outdoors; power our future; strengthen tribal nations; and engage the next generation.

The extreme and prolonged drought facing the western States affects major U.S. river basins in many many western states. The effects of the current drought on California water, its agrarian economy, and its communities are particularly acute. The Colorado River Basin—crucial for seven States and several Tribes, in addition to two countries—is also enduring historic drought. Nearly 40 million people rely on the Colorado River and its tributaries for some, if not all, of their municipal needs. The Basin is experiencing the worst drought in recorded history; the period from 2000 through 2015 was the driest 16-year period in more than 100 years of record keeping. In 2015, Lake Mead declined to its lowest elevation since the 1930s. Snowpack, which functions as a reservoir storage for many western basins, is diminishing.

Water year 2016 is shaping up to be influenced by the periodic "El Nino" anomaly associated with warmer ocean temperatures in portions of the Pacific that generally lead to a wetter than normal year in areas of the western U.S., including California. Recent rain and snow events are tremendously welcome in areas ravaged by recent droughts, however one wet year alone will not alleviate the impacts from the multi-year drought. Groundwater must be replenished before runoff can fill rivers and reservoirs and the hydrologic system as a whole will need time to recover. This water year exists within the backdrop of long-term sustained climatic change; as the National Climate Assessment states, "Short-term (seasonal or shorter) droughts are expected to intensify in most U.S. regions. Longer-term droughts are expected to intensify in large areas of the Southwest, southern Great Plains, and Southeast." As one of the Nation's primary suppliers and protectors of water, Reclamation needs to continue to plan and prepare for the next, perhaps more intense drought and its successors, even as we are guardedly optimistic about this water year.

Reclamation's dams, water conveyances, and power generating facilities are integral components of the Nation's infrastructure. Protecting and extending the benefits provided by these structures are among the many significant challenges facing Reclamation that extend over the next five years and beyond in its ability to achieve progress on its objectives in the area of certainty, sustainability and resiliency with respect to water supplies. The changing climate and competing demands are increasingly impacting already strained systems. Reclamation's water and power projects and activities throughout the western United States are not only the foundation for essential and safe water supplies, but also provide renewable energy in the form of hydropower, and sustain ecosystems that support fish and wildlife, recreation, and rural economies.

Reclamation's budget includes a substantial request for Indian Water Rights settlements, continuing the high prioritization of this program to meet trust and treaty obligations.

This budget addresses priorities by allocating funds based on objective and performance-based criteria to most effectively implement Reclamation's programs and its management responsibilities for its water and power infrastructure in the West. Climate variability adaptation, water conservation, improving infrastructure, sound science to support critical decision-making, and ecosystem restoration were balanced in the formulation of the FY 2017 budget. Reclamation continues to look at ways to more efficiently plan for the future challenges faced in water resources management and to improve the way it does business.

As the largest supplier and manager of water in the 17 western States and the nation's second largest producer of hydroelectric power, Reclamation's projects and programs are foundational to driving and maintaining economic growth in hundreds of basins throughout the western States. Reclamation manages water for agricultural, municipal and industrial use and also provides flood control and recreation for millions of people. Reclamation's activities, including recreation benefits, provide an economic contribution of \$48.4 billion, and support approximately 361,000 jobs¹.

Reclamation owns 76 hydroelectric power plants and operates and maintains 53 of those plants. The 53 hydroelectric power plants account for 15 percent of the hydroelectric generating capacity in the United States. Annually, Reclamation generates over 40 billion kilowatt hours of electricity, enough to meet the annual needs of over 3.5 million households, and collects nearly \$1.0 billion in gross revenues for the Federal government. It would take more than 23.5 million barrels of crude oil or about 6.8 million tons of coal to produce an equal amount of energy with fossil fuel plants. As a result, Reclamation's facilities preclude the production of over 27 million tons of carbon dioxide that would have been produced by fossil fuel power plants.

This budget is focused on meeting Administration and Department priorities: Indian water rights settlements, ecosystem restoration in the California Bay-Delta and San Joaquin River, and healthy watersheds and sustainable, secure water supplies. In order to meet Reclamation's mission goals one focus of its programs must be building a landscape-level understanding of our resources and the protection and restoration of the aquatic and riparian environments influenced by its operations. Ecosystem restoration involves a large number of activities, including Reclamation's Endangered Species Act recovery programs, which directly address the environmental aspects of the Reclamation mission. Reclamation is engaged in several River Restoration projects, including the San Joaquin River Restoration, which can be considered a centerpiece for our river restoration efforts.

The Department has a significant role to play in securing an energy future for our Nation that is self-reliant and sustainable. Through early planning, thoughtful mitigation, and the application of sound

¹ Department of the Interior's Economic Report FY 2014, June 23, 2015. From an economic perspective, it should be noted that the Total Value Added of economic contribution is \$29.17 billion. This figure nets out the cost of intermediate inputs (i.e., goods and services purchased from other industries or imported that are used as inputs to produce a good or service), and is a more appropriate concept when considering Interior's contributions to the nation's gross domestic product (GDP). Also, Reclamation's FY 2014 economic contributions are lower compared to FY 2013 for several reasons. Principally, there was a methodological adjustment in the calculation of the economic contributions associated with Reclamation-supplied irrigation water to account for the fact that Central Valley Project (CVP) water is not the sole source of water available to districts served by CVP. Previously, it had been assumed that CVP water was the sole contributor to the economic contributions associated with irrigation water. The ongoing drought also played a role.

science, the Department is working to ensure that the Nation's "all-of-the-above" energy development strategy includes the right protections for land, wildlife, and water.

Reclamation is continuing its efforts to strengthen its evidence-based decision-making in various program components. This includes the WaterSMART program, science and technology, climate variability adaptation strategies, and the improved planning of future Indian Water Rights Settlements. This effort is geared to demonstrate effectiveness, efficiency, and innovation in Reclamation programs.

Administration and Secretarial Initiatives

Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Ensuring healthy watersheds and sustainable, secure water supplies is a Departmental and Administration priority in which Reclamation plays a key role. Managing water resources in the face of climate change and constrained resources will be a significant factor in the future of agricultural, rural, and municipal economies in the West. Reclamation continues to look at ways to more efficiently plan for the future challenges faced in water resources management and to improve the way it does business. The funding proposed in Reclamation's FY 2017 budget is for key program areas and projects important to and in line with Administration objectives. The budget also supports Reclamation's participation in efforts to address emerging water supply demands and water shortage issues in the West, to promote water conservation and improved water management, and to take actions to mitigate adverse environmental impacts of projects.

The Department has a significant role to play in securing an energy future for our Nation that is self-reliant and sustainable. Through early planning, thoughtful mitigation, and the application of sound science, the Department is working to ensure that the Nation's "all-of-the-above" energy development strategy includes the right protections for land, wildlife, and water.

Building a Landscape-Level Understanding of Our Resources

Reclamation continues to develop tools, expertise, and land and water management analyses to build a Landscape-Level Understanding of our Water Resources in the West. This is a key building block for meeting mission goals of managing water resources in a responsible way that addresses Landscape-Level issues throughout the West. Factors such as drought, salinity, and fire impact many Reclamation activities. Reclamation continues to look for solutions through the larger lens of the entire landscape.

Data Modernization: Reclamation is addressing the requirements of the President's Open Data Policy by making Reclamation's water and related data better managed, improving accessibility, and sharing with other agencies, stakeholders, and the public. FY 2017 funding levels include \$2.0 million for Reclamation to help satisfy the objectives of the Open Data Policy.

Climate Resilience

Climate change is a leading threat to natural and cultural resources across the country. The effects exacerbate existing threats from drought, floods and wildfires and present a growing challenge to the resilience of communities. Reclamation is on the front lines confronting climate challenges on a daily basis, addressing more intense fire patterns, increasing sea level rise, record breaking drought, more extreme weather events, invasive species, and changing habitat. The FY 2017 budget request proposes

funding to improve understanding of the impacts of climate change and adapt to these changes on the ground. Examples of the investments are included in several sections below, including Science and Technology and WaterSMART

As the largest wholesaler of water in the country, Reclamation has a leading role, in coordination with other Federal agencies, State officials, local water users, and interested stakeholders, in mitigating the impacts of climate variability and drought and developing adaptation strategies to help ensure water supplies for future generations. Several of Reclamation's activities advance the Secretary's priority on Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies.

Consistent with the President's 2013 Climate Action Plan, Reclamation is actively engaged in understanding, and effectively adapting to, the risks and impacts of a changing environment on western water management. Through programs such as the Drought Response program, initiated in FY 2015, Reclamation helps communities manage drought and develop long-term resilience strategies.

Through the Resilient Infrastructure program, Reclamation will identify ways to proactively maintain and improve existing infrastructure for system reliability, safety, and efficiency (i.e., water conservation) to prepare for extremes and to support healthy and resilient watersheds.

Because hydropower production is also vulnerable to altered water availability resulting from climate variability, Reclamation is in the process of installing four "wide-head" turbines at Hoover Dam to increase the operational range and flexibility of the hydropower operations.

Reclamation is also taking action to improve water management. Reclamation's WaterSMART Grants, Water Conservation Field Services Program, and Title XVI Water Reclamation and Reuse Program support climate adaptation by leveraging Federal and non-Federal funding to conserve tens of thousands of acre-feet of water each year in urban and rural settings, and on both large and small scales.

Strengthening Tribal Nations

Reclamation is requesting establishment of an Indian Water Rights Settlements (IWRS) account to assure continuity in the construction of the authorized projects and to highlight and enhance transparency in handling these funds. This account is proposed to cover expenses associated with Indian water rights settlements contained in the Claims Resolution Act (CRA) of 2010 (Public Law 111-291), Title X of the Omnibus Public Land Management Act of 2009 (Public Law 111-11).

Reclamation proposes \$106.2 million for the implementation of Indian Water Rights Settlements, a decrease of \$6.3 million from 2016 enacted, due to providing the \$4.0 million necessary to complete the Taos Pueblo Water Rights Settlement in 2016 and competing statutory requirements. The budget includes \$87.0 million for the Navajo-Gallup Water Supply Project, \$12.8 million for the early stages of construction for the Crow Tribe Water Rights Settlement, and \$6.4 million, an increase of \$379,000 from 2016 enacted for the Aamodt Litigation Settlement. In addition to requesting limited funding consistent with current activity, the Indian Water Rights Settlements will draw on their available mandatory funding to continue project activities.

Within Water and Related Resources, \$25.1 million is requested to support tribal settlements within a number of projects, including the Nez Perce Settlement within Columbia and Snake River Salmon Recovery Project (\$5.2 million), the San Carlos Apache Tribe Water Settlement Act (\$1.6 million), the Ak-Chin Indian Water Rights Settlement Act (\$15.7 million), and Animas La Plata (\$2.7 million); \$12.2 million for required tribal operation and maintenance for the Mni Wiconi Project is also requested.

Reclamation is requesting \$10.4 million for the Native American Affairs program to improve capacity to work with and support Tribes in the resolution of their water rights claims and to develop sustainable water sharing agreements and management activities. This funding will also strengthen Department-wide capabilities to achieve an integrated and systematic approach to Indian water rights negotiations to consider the full range of economic, legal, and technical attributes of proposed settlements.

The Water and Related Resources account supports Reclamation efforts to empower tribal nations by supporting a number of projects including rural water projects, such as the Mni Wiconi Project, Ft. Peck Reservation/Dry Prairie Rural Water System, Rocky Boys/North Central Montana Rural Water System and the Garrison Diversion Unit. The account also supports tribal activities in the Columbia and Snake River Federal Columbia River Power System Endangered Species Act Implementation, the Ak Chin Indian Water Rights Settlement Act and the San Carlos Apache Tribe Water Settlement Act Project.

Celebrating and Enhancing America's Great Outdoors

The Department has helped lead the long-term effort to implement the President's America's Great Outdoors (AGO) Initiative. To meet Reclamation's mission goals, a part of its programs focus on the protection and restoration of the aquatic and riparian environments influenced by its operational activities of providing reliable supplies of water and power. The President's budget for Reclamation River Restoration proposes \$135.5 million, an increase of \$8.1 million from 2016 enacted, for AGO related activities.

The AGO Initiative fosters the intrinsic link between healthy economies and healthy landscapes to increase tourism and outdoor recreation in balance with preservation and conservation. This initiative features collaborative and community-driven efforts and outcome-focused investments focused on preserving and enhancing rural landscapes, urban parks and rivers, important ecosystems, cultural resources, and wildlife habitat. These activities incorporate the best available science, a landscape-level understanding, and stakeholder input to identify and share conservation priorities.

River Restoration involves a large number of activities, including Reclamation's Endangered Species Act (ESA) recovery programs, which directly address the environmental aspects of the Reclamation mission. Reclamation is increasingly engaged in several river restoration projects, such as the San Joaquin River Restoration Program, the California Bay-Delta Restoration program and the Platte River Endangered Species Recovery Implementation Program. These projects are centerpieces for Reclamation's River Restoration efforts.

Requested funding directly supports the goals of the AGO program, through local and basin-wide collaboration in watershed partnerships. Reclamation's River Restoration helps reduce environmental conflicts and litigation, as evidenced by the San Joaquin River Restoration Program, where 18 years of litigation was settled providing restored water flows and re-introduction of salmon to the River, as well as certainty on water and power delivery to customers. Restoration programs support tribal needs in restoring fisheries affected by water and power operations as demonstrated by the Trinity River Restoration program which is re-establishing the physical process and rescaling the Trinity River as a foundation for fishery recovery. Restoration programs also develop valuable conservation skills for young people working on projects, as seen on the Lower Colorado River Multi-Species Conservation Program among others.

Powering Our Future

Through early planning, thoughtful mitigation, and the application of sound science, The Department is working to ensure the Administration's "all-of-the-above" energy strategy includes not only traditional sources, but also the further development of new, cleaner resources to help mitigate the causes of climate variability.

Reclamation's FY 2017 request includes \$1.3 million to support Reclamation's Sustainable Energy Strategy and actions identified through the Sustainable Hydropower MOU with our partners Department of Energy (DOE) and US Army Corps of Engineers. This funding will provide for the policy execution and oversight for increased hydropower development at existing Reclamation facilities through Lease of Power Privilege or FERC licensing, and will allow Reclamation to work with Tribes to assist them in developing renewable energy sources. Reclamation will continue to fund studies designed to help Reclamation support the integration of variable renewable resources and support analyses of the small sustainable hydropower facilities developed under the joint Reclamation/ DOE Funding Opportunity Announcement by providing support to regions, stakeholders, and developers. Funding will also support a study to increase small run of the river for hydropower's ability to deliver flexible energy to provide grid support and help integrate variable renewable generation resources. Reclamation will also use this funding to continue work to create automated data collection and archive systems to aid in hydropower benchmarking, performance testing and strategic decision making. These important projects will assist in the production of cleaner, more efficient renewable energy and will support the Renewable Energy Resource Development Priority Goal.

Engaging the Next Generation

To meet the Secretary's challenge regarding the Engaging the Next Generation initiative, Reclamation will strive to expand youth programs and partnerships to accomplish high priority projects, and promote quality participant experiences and pathways to careers.

Reclamation is working to engage individuals, 15 to 35 years of age, through temporary positions with the Bureau, as conservation interns, or as part of conservation work crews in conjunction with a partnering organization. Further, Reclamation will continue to use the Public Land Corps Act authority and the Youth Conservation Corps Act to enter into partnership agreements. These agreements will be used to assist on-the-ground projects and internships involving youth in cooperative efforts in cultural and natural resource conservation related to Reclamation projects. In addition, a partnership agreement with the National Fish and Wildlife Foundation will help provide additional youth conservation employment opportunities to advance the following objectives:

- Bridge the growing disconnect between young people and the great outdoors.
- Expand efforts through the use of public-private partnerships and collaborations with other agencies.
- Inspire young people to play, learn, serve and work outdoors.
- Build job skills, improve Interior's lands and create opportunities for veterans.
- Create lasting connections to the land for the next generation.

Infrastructure

Reclamation's dams, water conveyances, and power generating facilities are integral components of our Nation's infrastructure, that provide basic water and power services to millions of customers in hundreds

of basins throughout the Western United States.. Effectively managing the benefits that these structures provide is among the significant challenges facing Reclamation that will extend over the next several years. Reclamation manages 475 dams throughout the 17 Western States. The Dam Safety Program has identified 366 high and significant hazard dams at 243 facilities. Through constant monitoring and assessment, Reclamation strives to achieve the best use of its limited resources to ensure dam safety and to maintain our ability to store and divert water and to generate hydropower.

Our Dam Safety program utilizes the latest information and technology to evaluate and address the most pressing safety risks. The Dam Safety Program continues to be one of Reclamation's highest priorities. The program helps ensure the safety and reliability of Reclamation dams to protect the downstream public. Approximately 50 percent of Reclamation's dams were built between 1900 and 1950, and approximately 90 percent of the dams were built before currently used, state-of-the-art design and construction practices. Reclamation evaluates dams and monitors performance to ensure that risks do not exceed current Reclamation public protection guidelines. The FY 2017 budget request includes \$86.1 million for the Dam Safety Program. Major efforts will focus on modifications at dams in California, Wyoming, and Nebraska.

The proposed budget also includes appropriations for specific projects for Replacement, Additions, and Extraordinary Maintenance (RAX) activities across Reclamation. This request is central to mission objectives of operating and maintaining projects to ensure delivery of water and power benefits. Reclamation's RAX request is part of its overall Asset Management Strategy that relies on condition assessments, condition/performance metrics, technological research and deployment, and strategic collaboration to better inform and improve the management of its assets and deal with its infrastructure maintenance challenges. Additional RAX items are directly funded by revenues, customers, or other Federal agencies (e.g., Bonneville Power Administration).

Account Level Details

The FY 2017 budget allocates funds to projects and programs based on objective, performance-based criteria to most effectively implement Reclamation's programs and its management responsibilities for its water and power infrastructure in the West. Of note, the summary of the Brookings Institute's working draft, *Roadmap to Water Marketing Using Market Forces to Address the Western Water Crisis Focusing on the Federal Perspective*, noted the following, in describing Reclamation's role in the management of water infrastructure and storage facilities across the West: "Reclamation has emerged as a leader in efforts to reform western water management, confront growing imbalances in water supply and demand, face the realities and uncertainties of climate change, address past environmental harms, and engage in efforts to adapt to increased uncertainty and manage water-supply risk."

The FY 2017 budget accordingly emphasizes the following principles:

- 1) *Shared Responsibility* Securing non-Federal cost-share partners to meet project or program funding needs, and leverage funding through these collaborative partnerships.
- 2) Merit-Based Funding Utilizing competitive processes for the awarding of grants, contracts, or other government services based on published criteria that reflect Departmental and Administrative priorities. The selection of awards is, wherever possible, guided by high quality evidenced based research and performance measures.
- 3) Regional Equity Managing Reclamation's water infrastructure and programs by setting priorities on a West-wide basis.

The FY 2017 budget for Reclamation totals \$1.1billion in gross budget authority. The budget is partially offset by discretionary receipts in the Central Valley Project Restoration Fund (\$55.6 million) resulting in net discretionary budget authority of \$1,050.6 million.

Water and Related Resources - \$813,402,000

The FY 2017 Water and Related Resources budget provides funding for five major program activities — Water and Energy Management and Development (\$224.7 million), Land Management and Development (\$38.2 million), Fish and Wildlife Management and Development (\$120.7 million), Facility Operations (\$250.4 million), and Facility Maintenance and Rehabilitation (\$179.4 million). The funding proposed in Reclamation's FY 2017 Budget supports key programs important to the Department and in line with Administration objectives. These programs include:

The Ensuring Healthy Watersheds and Sustainable Secure Water Supplies initiative is accomplished through the WaterSMART program – Sustain and Manage America's Resources for Tomorrow. At \$61.5 million, WaterSMART helps to achieve sustainable water management and maintains economic productivity in the western United States. It addresses current and future water shortages, including drought; degraded water quality; increased demands for water and energy from growing populations and energy needs; amplified recognition of environmental water requirements; investment in climate resilient infrastructure and support for healthy and resilient watersheds; and the potential for decreased water supply availability due to drought and a dynamic climate.

In supporting the Department's *America's Great Outdoors* Initiative, ecosystem restoration is a key underpinning of Reclamation's mission. Ecosystem restoration involves a large number of Reclamation's activities, including Reclamation's Endangered Species Act recovery programs, which directly address the environmental aspects of the Reclamation mission. Reclamation has a number of other programs that contribute towards this initiative, such as the Columbia River Salmon Ecosystem Restoration Program, the Middle Rio Grande Project Collaborative Program and the Multi-Species Conservation Program within the Lower Colorado River Operations Program, among many others.

Reclamation has implemented an integrated strategy to respond to the impacts of a changing environment on the resources managed by the Department, through participation in Interior Climate Science Centers and Landscape Conservation Cooperatives, and assessments conducted through the West-Wide Climate Risk Assessments (WWCRA). In FY 2017, Reclamation will continue participating in the Desert and Southern Rockies Landscape Conservation Cooperatives as a co-lead with the Fish and Wildlife Service, and will continue implementation of the Basin Studies, and WWCRAs, and other related efforts to ensure sustainable water supplies. Reclamation is allocating \$5.2 million to these efforts.

Strengthening Tribal Nations: Reclamation helps to empower tribal nations by continuing its support through a number of its projects that range from endangered species recovery, to rural water, and implementation of water rights settlement actions. Reclamation's budget supports its role in implementing Indian Water Rights Settlements and also includes an increase to improve coordination and application of expertise to analyze Indian water settlements more effectively and expediently. This funding will strengthen Department-wide capabilities in the Secretary's Indian Water Rights Office to achieve an integrated and systematic approach to Indian water rights negotiations to consider the full range of economic, legal, and technical attributes of proposed settlements.

The FY 2017 budget continues the implementation of two of the four Indian Water Rights Settlements enacted in December 2010 (Crow and Aamodt), as well as the Navajo-Gallup Water Supply Project authorized in 2009, through a new Indian Water Rights Settlements account proposed for FY 2017 at

\$106.2 million. FY 2016 appropriations completed discretionary funding requirements for the Taos settlement and mandatory funds are currently being used to implement the White Mountain Apache settlement authorized in the CRA. Funding to empower tribal nations is also included within a number of projects such as Mni Wiconi Project for the required tribal operation and maintenance (\$12.2 million), the Nez Perce Settlement within Columbia and Snake River Salmon Recovery Project (\$5.2 million), the San Carlos Apache Tribe Water Settlement Act (\$1.6 million), and the Ak Chin Indian Water Rights Settlement Act (\$15.7 million).

Research and Development: The President's Budget continues to promote research and development to advance the science and technology that supports best management of the country's natural resources and heritage. Continued and enhanced coordination of science activities across bureaus will be required to achieve the Department's important mission objectives. The FY 2017 budget facilitates this process by supporting integrated efforts to achieve resource management outcomes.

Reclamation has identified several key areas for investment where coordination with other Department bureaus will leverage results to more effectively achieve mission outcomes. Reclamation's FY 2017 budget for research and development (R&D) programs appear under two line items: Science and Technology and Desalination and Water Purification. Both programs focus on Reclamation's mission of water and power deliveries. Their combined budget is \$28.6 million.

Science and Technology Program: Scientific discovery, technological breakthroughs, and innovation are the primary engines for expanding the frontiers of human knowledge and are vital for responding to the challenges and opportunities of the 21st century. Scientific and engineering innovation promotes sustainable economic growth and job creation, improves the health of all Americans, moves us toward a clean energy future, addresses global climate change, and helps manage competing demands on environmental resources. Science and Technology (S&T) goals are to identify the technical and scientific problems affecting accomplishment of Reclamation's mission, to promote development of cost-effective solutions, and to communicate those solutions to Reclamation offices, other water and power management officials, and the general public. The S&T Program funding is allocated and coordinated across four areas:

- Research and Development Projects (including those related to Open Water Data Initiative, Climate Change and Variability, and Renewable Energy),
- Water and Power Technology Prize Competitions (Challenges),
- Technology Transfer, and
- Dissemination / R&D Infrastructure.

These activities support the Administration's Science and Technology Priorities for the FY 2017 Budget, including sponsorship of technology prize competitions as a means to spur innovation by enlisting a national solver community to help find breakthroughs or overcome technical obstacles or complexities. The program is also supporting research to address Administration science priorities related to climate adaptation and clean energy. Research on climate adaptation is producing important information on climate change impacts to water and environmental resources, as well as tools for water managers such as downscaled climate model projections of water supply. Clean energy research is focused on developing technologies to reduce operation and maintenance costs, reduce failures, and increase overall reliability and efficiency of Reclamation's hydropower generation infrastructure. In 2017, \$8.5 million is included for the water technology challenges program to fund an ambitious technology challenge prize focused on next-generation advanced water treatment technologies that would significantly reduce the cost and electricity usage of advanced water treatment. In addition to Administration priorities, S&T emphasizes research on sustainable infrastructure, advanced water treatment, environmental stewardship, safety, and invasive zebra/quagga mussels. The program is partnering with the U.S. Army Corps of Engineers to

foster research projects to develop technologies that extend the operating life and reduce maintenance costs of Reclamation's structures, and with other Federal and non-Federal partners improve the health and safety of Reclamation staff. S&T also continues to develop improved methods for monitoring, detection and control of invasive mussels that continue to spread in the West, infesting Reclamation dams, power plants, and facilities of other water providers.

Desalination and Water Purification Research Program (DWPR): This program supports desalination research, development and demonstrations for the purpose of converting unusable waters into useable water supplies. Expanding water supplies through advanced water treatment is a key component to a strong portfolio of water supply options and climate change adaptation tools that water managers need to adapt to changes in water availability and increased demand for fresh water supplies. The DWPR Program supports competitive, merit-based research, development and demonstration efforts undertaken by universities, public, and private sector research organizations on a cost-shared basis. The program goals are to produce new clean water treatment technologies, reduce costs, and decrease environmental impacts of treating impaired waters in order to create new water supplies in a sustainable manner and thereby relieve stress on drought stricken communities, Western rural communities, Native Americans, and western river basins. Program funding also supports operation and maintenance of Reclamation's Brackish Groundwater National Desalination Research Facility in Alamogordo, New Mexico.

Central Valley Project Restoration Fund (CVPRF) - \$55,606,000

This fund was established by the Central Valley Project Improvement Act, Title XXXIV of P.L. 102-575, October 30, 1992. The budget of \$55.6 million is expected to be offset by discretionary receipts totaling \$55.6 million, which is the maximum amount that can be collected from project beneficiaries under provisions of Section 3407(d) of the Act. The discretionary receipts are adjusted on an annual basis to maintain payments totaling \$30.0 million (October 1992 price levels) on a three-year rolling average basis. The budget of \$55.6 million for the CVPRF was developed after considering the effects of the San Joaquin River Restoration Settlement Act (P.L. 111-11, March 30, 2009) which redirects certain fees, estimated at \$1.5 million in FY 2017, collected from the Friant Division water users to the San Joaquin Restoration Fund. Funds will be used for restoration and recovery of Chinook salmon and other anadromous fisheries; acquiring and delivering water to wetland habitat areas (refuges) for waterfowl; and other fish and wildlife habitat restoration, improvement, and acquisition activities in the Central Valley Project area of California.

California Bay-Delta Restoration Fund - \$36,000,000

The Act authorized multiple federal agencies to participate in the implementation of the CALFED Bay-Delta Program as outlined in the August 28, 2000, Record of Decision (ROD) for the CALFED Bay-Delta Program Programmatic Environmental Impact Statement and Environmental Impact Report. The legislation directed the implementing agencies to undertake a set of broadly described programmatic actions identified in the ROD to the extent authorized under existing law. In addition, the Act authorized \$389.0 million in Federal appropriations for new and expanded authorities. The new and expanded authorities authorized by P.L. 108-361 expires September 30, 2016. Appropriations language proposed in the FY 2017 President's Budget would extend the expiration date for new and expanded authorities' appropriations to September 30, 2018.

The FY 2017 Budget of \$36.0 million implements priority activities pursuant to the CALFED Bay-Delta Authorization Act of October 25, 2004. On December 22, 2009, six Federal agencies – the Department of the Interior, Department of Commerce, Department of Agriculture, Department of the Army,

Environmental Protection Agency, and the Council on Environmental Quality – released the Interim Federal Action Plan for the California Bay-Delta. With this Plan, the Federal agencies are describing in a single document a variety of Federal actions and investments the Administration is undertaking in a coordinated fashion to help address California's current water supply and ecological crises. This budget supports actions in the Interim Federal Action Plan under the following program activities: \$2.2 million for Renewed Federal State Partnership, \$5.3 million for Smarter Water Supply and Use, and \$28.5 million for Habitat Restoration.

San Joaquin River Restoration Fund - \$36,000,000

This fund was established to implement the provisions described in the Settlement (Settlement) for the *National Resources Defense Council (NRDC) et al.* v. *Rodgers* lawsuit. The Settlement's two primary goals are: 1) To restore and maintain fish populations in "good condition" in the main stem of the San Joaquin River below Friant Dam to the confluence of the Merced River, including naturally reproducing and self-sustaining populations of salmon and other fish; and 2) To reduce or avoid adverse water supply impacts to the Friant Division long-term contractors that may result from the Interim Flows and Restoration Flows provided for in the Settlement. Reclamation proposes \$36.0 million of discretionary funds for the San Joaquin River Restoration Fund account in FY 2017.

Indian Water Rights Settlements - \$106,151,000

Reclamation is requesting establishment of an Indian Water Rights Settlements account to assure continuity in the construction of the authorized projects and to highlight and enhance transparency in handling these funds. This account is proposed to cover expenses associated with the Indian water rights settlements contained in the Claims Resolution Act (CRA) of 2010 (Public Law 111-291) and the Navajo-Gallup Water Supply Project within Title X of the Omnibus Public Land Management Act of 2009 (Public Law 111-11). The total budget for Reclamation's implementation of these Indian Water Rights Settlements in FY 2017 is \$106.2 million in discretionary funding.

Policy and Administration - \$59,000,000

The \$59.0 million budget will be used to: 1) develop, evaluate, and direct implementation of Reclamation-wide policy, rules, and regulations, including actions under the Government Performance and Results Act; and 2) manage and perform functions that are not properly chargeable to specific projects or program activities covered by separate funding authority.

Funding will continue to support implementation of Reclamation's Safety Action Plan, in order to prevent serious accidents such as ones that occurred in recent years. A Department review of Reclamation's Safety and Occupational Health (SOH) Program identified areas needing improvement, which resulted in Reclamation's a Safety Action Plan with 21 "findings." Reclamation has established employee teams to address the findings; implementing activities began in FY 2015 and will occur over the next two years.

Working Capital Fund - \$0

This fund is operated for the purpose of managing financial activities such as acquisition and replacement of capital equipment, cost recovery for services provided to others, fleet management, administration of information technology services, and recovery of indirect costs in the Technical Service Center,

Management Services Office, and regional and area offices. The fund is credited with appropriations and other funds for the purpose of providing or increasing capital. The fund operates on a self-supporting basis through user charges that are deposited in the fund. It is through the Working Capital Fund that Reclamation pays for many Departmental Centralized services.

President's Management Agenda

The Department of the Interior supports the President's Management Agenda to build a better government, one that delivers continually improving results for the American people and renews their faith in government. The Bureau of Reclamation is actively involved in the government-wide effort to bring forward the most promising ideas to improve government effectiveness, efficiency, spur economic growth, and promote people and culture. The Bureau of Reclamation supports achievement of the President's Management Agenda in these four pillars.

The FY 2017 President's Budget includes \$469,500 for Reclamation participation in the Department's IT Transformation efforts through the Department's Working Capital Fund. These funds will support IT Transformation project-level planning and coordination and the implementation of enterprise IT services.

DOI Strategic Plan

The FY 2014-2018 DOI Strategic Plan, in compliance with the principles of the GPRA Modernization Act of 2010, provides a collection of mission objectives, goals, strategies and corresponding metrics within an integrated and focused approach for tracking performance across a wide range of DOI programs. The DOI Strategic Plan framework continues to serve as the foundational structure for the description of program performance measurement and planning of the FY 2017 President's Budget. Additional details for achieving the Strategic Plan's goals are presented in the DOI Annual Performance Plan and Report (APP&R). Bureau and program specific plans for FY 2017 will be consistent with the goals, outcomes, and measures described in the recent updated framework for the FY 2014-2018 version of the DOI Strategic Plan and related implementation information in the Annual Performance Plan and Report (APP&R).

Priority Goals

Priority goals are a key element of the President's agenda for building a high-performing government. The priority goals demonstrate high direct value to the public or reflect achievement of key DOI missions. These goals focus attention on initiatives for change that have significant Performance outcomes which can be clearly evaluated, and are quantifiable and measurable in a timely manner.

Reclamation measures progress toward meeting the goals, tracks and validates completion of key milestones, and compares progress among its peers to identify best practices. Reclamation is participating in the following priority goals to help achieve the objectives set out by the President:

• Water Conservation & Supply Enhancement

Goal: The FY 2016-2017 proposed Priority Goal specifies, "By September 30, 2017, the Department of the Interior will facilitate the availability of water supplies employing conservation, efficiency, and

technology in the western United States through Bureau of Reclamation water conservation programs to 1,040,000 acre-feet cumulatively since the end of FY 2009."

Bureau Contribution: Reclamation contributes towards the Department's goal by partnering with States, Tribes, irrigation and water districts and other organizations with water or power delivery authority to implement programs resulting in water conservation. Programs contributing toward the Priority Goal include WaterSMART Grants; the Title XVI Program; the Water Conservation Field Services Program (WCFSP); the Bay-Delta Restoration Program; the Yakima River Basin Water Enhancement Project; and the Upper Colorado River Recovery Implementation Program.

Implementation Strategy: Through FY 2015, Reclamation has reported more than 977,000 acre-feet of water savings toward the Priority Goal. In FY 2016, programs that contribute to the Water Conservation & Supply Enhancement Priority Goal are expected to result in water savings of approximately 62,000 acre-feet. With the funding requested in FY 2017, programs that contribute toward the priority goal are expected to also result in approximately an additional 60,500 acre-feet of water savings. For the three competitive grant programs that contribute toward the Priority Goal, WaterSMART Grants, Water Conservation Field Services Program and the Bay-Delta Restoration Program, it is important to note that not all of the funding is allocated to activities directly resulting in water savings. Funding for these programs support additional goals, such as the development of water conservation plans and projects addressing endangered species concerns.

Performance Metrics: Reclamation has developed a set of internal measures and milestones to monitor and track achievement of the Priority Goals. Progress in these areas will be reported and reviewed throughout the year by the Deputy Secretary's Operations Planning Group to identify and address any need for enhanced coordination or policy measures to address barriers to the achievement of the Priority Goal for Water Conservation.

• Renewable Energy Resource Development

Goal: The FY 2016-2017 proposed Priority Goal specifies, "By September 30, 2017, increase approved capacity authorized for renewable (solar, wind, geothermal, and hydropower) energy resources affecting Department of the Interior managed lands, while ensuring full environmental review, to at least 16,600 Megawatts (since end of FY 2009)."

Bureau Contribution: Reclamation contributes to the Departmental goal primarily through the Memorandum of Understanding (MOU) on Hydropower with DOI, DOE and Army Corps of Engineers (USACE) signed March 24, 2010. The MOU encourages the development of sustainable hydropower at Federal facilities in order to help meet the Nation's needs for reliable, affordable, and environmentally sustainable hydropower by prioritizing goals and coordinating hydropower research and development efforts through studies and assessments. This is an on-going, collaborative effort with DOI, DOE, and USACE. A two-year progress report was completed in April 2012. On March 24, 2015, DOI, DOE, and USACE signed the MOU renewal agreement, extending the MOU for an additional five years through 2020. The signed agreement renews the agencies' commitment to sustainable hydropower generation with a second phase of collaboration, outlined in a Phase II Action Plan. The Phase II Action Plan priorities include: (1) technology development; (2) asset management; (3) hydropower sustainability; (4) quantifying hydropower capabilities and value in power systems; and (5) information sharing, coordination, and strategic planning.

Implementation Strategy Reclamation's FY 2017 request includes \$1.3 million to support Reclamation's Sustainable Energy Strategy and actions identified through the Sustainable Hydropower MOU with our partners DOE and US Army Corps of Engineers. This funding will provide for the policy execution and

oversight for increased hydropower development at existing Reclamation facilities through Lease of Power Privilege or FERC licensing, and will allow Reclamation to work with Tribes to assist them in developing renewable energy sources. Reclamation will continue to fund studies designed to help Reclamation support the integration of variable renewable resources and support analyses of the small sustainable hydropower facilities developed under the joint Reclamation/Department of Energy (DOE) Funding Opportunity Announcement by providing support to regions, stakeholders, and developers. Funding will also support a study to increase small run of river hydropower's ability to deliver flexible energy to provide grid support and help integrate variable renewable generation resources. Reclamation will also use this funding to continue work to create automated data collection and archive systems to aid in hydropower benchmarking, performance testing and strategic decision making. These important projects will assist in the production of cleaner, more efficient renewable energy and will support the Renewable Energy Resource Development Priority Goal.

Performance Metrics: The Department is developing a set of internal measures and milestones to monitor and track achievement of the Priority Goals. Progress in these areas will be reported and reviewed throughout the year by the Deputy Secretary's Operations Planning Group to identify and address any need for enhanced coordination or policy measures to address barriers to the achievement of the Renewable Energy Resource Development Goal.

• Climate Change Adaptation Management

Goal: The FY 2016-2017 proposed Priority Goal specifies, "By September 30, 2017, the Department of the Interior will mainstream climate change adaptation and resilience into program and regional planning, capacity building, training, infrastructure, and external programs, as measured through the Strategic Sustainability Performance Plan scorecard."

Bureau Contribution: Reclamation will contribute to this Departmental goal by 1) incorporating climate change data into at least five agency-wide or regional studies and/or long term planning efforts; 2) supporting collaboration across agencies such as the Climate Change and Water Working Group (CCAWWG); and promoting transfer of knowledge about climate change, through development and delivery of several climate training courses for water managers developed in collaboration with CCAWWG and the Universities Corporation for Atmospheric Research - Cooperative Program for Operational Meteorology, Education, and Training (COMET) Program; 3) participating in inter-agency efforts to assess agency and Departmental policies, directives and standards related to potential climate change associated hydrologic impacts on dam operations and dam safety practices; 4) incorporating climate change adaptation into resilient infrastructure decision framework and design criteria; and 5) integrating climate change adaptation into three Reclamation Manual releases that establish requirements for the implementation of external programs.

Performance Metrics: Reclamation has developed a set of internal milestones to monitor and track achievement of the Priority Goals. Progress in these areas will be reported and reviewed throughout the year by the Deputy Secretary's Operations Planning Group. This Group will identify and address any need for enhanced coordination or policy measures to address barriers to the achievement of the Priority Goal for Climate Adaptation.

Engaging the Next Generation

Goal: The FY 2016-2017 proposed Priority Goal specifies, "By September 30, 2017, the Department of Interior will provide 100,000 work and training opportunities over four fiscal years (FY 2014 through FY 2017) for individuals age 15 to 35 to support the Department's mission."

Bureau Contribution: Reclamation will engage the next generation and provide work and training opportunities through conservation partnerships and by leveraging funding through agreements with 21st Century Conservation Service Corps partners.

Implementation Strategy: In FY 2017, Reclamation will continue to provide work and training opportunities by leveraging funding through agreements with 21st Century Conservation Service Corps partners and through other conservation partnerships.

In FY 2017, Reclamation will continue to use the Public Land Corps Act authority and the Youth Conservation Corps Act to enter into partnership agreements. These agreements will be used to assist onthe-ground projects and internships involving youth in cooperative efforts in cultural and natural resource conservation related Reclamation projects. In addition, a partnership agreement with the National Fish and Wildlife Foundation will help provide additional youth conservation employment opportunities.

Performance Metrics: The Department is presently employing a set of internal measures and milestones to monitor and track achievement of the Priority Goals. Progress in these areas will be reported and reviewed throughout the year by the Deputy Secretary's Principals' Operations Group to identify and address any need for enhanced coordination or policy measures to address barriers to the achievement of the priority goal.

BUREAU OF RECLAMATION Budget Authority - FY 2015 - 2017 (\$ in Thousands)

Appropriation	FY 2015 Actual	FY 2016 Enacted	FY 2017 President's Budget
Water and Related Resources	978,131	1,118,972	813,402
Indian Water Rights Settlements	[90,000]	[112,483]	106,151
San Joaquin River Restoration Fund 1/	[34,380]	[35,000]	36,000
Subtotal	978,131	1,118,972	955,553
Loan Program	0	0	0
Policy and Administration	58,500	59,500	59,000
Working Capital Fund	0	0	0
California Bay-Delta Restoration	37,000	37,000	36,000
Central Valley Project Restoration Fund	49,629	49,528	55,606
Sub-Total - Current Authority	1,123,260	1,265,000	1,106,159
CVP Restoration Fund Offset	(47,436)	(49,528)	(55,606)
Total Net Discretionary Authority	1,075,824	1,215,472	1,050,553
Permanents and Other:			
CRDF, Boulder Canyon Project 2/	70,935	104,017	103,626
Miscellaneous Permanents ^{2/}	771	501	533
Trust Funds	(1)	3,073	3,000
Federal Lands Recreation Enhancement Act 2/	566	497	518
Loan Program (Subsidy Reestimates/Modification)	(500)	0	0
Loan Liquidating Account	(1,232)	(854)	(861)
San Joaquin River Restoration Fund 1/	0	0	0
Reclamation Water Settlements Fund	0	0	0
Sub-Total Permanent Authority and Other	70,539	107,234	106,816
GRAND TOTAL	1,146,363	1,322,706	1,157,369

Reflects enacted leglislation which implements the provisions described in the Stipulation of Settlement (Settlement) for the NRDC et al. v. Rodgers lawsuit.
 Reflects impact of sequestration in these activities

Bureau of Reclamation Regional Map

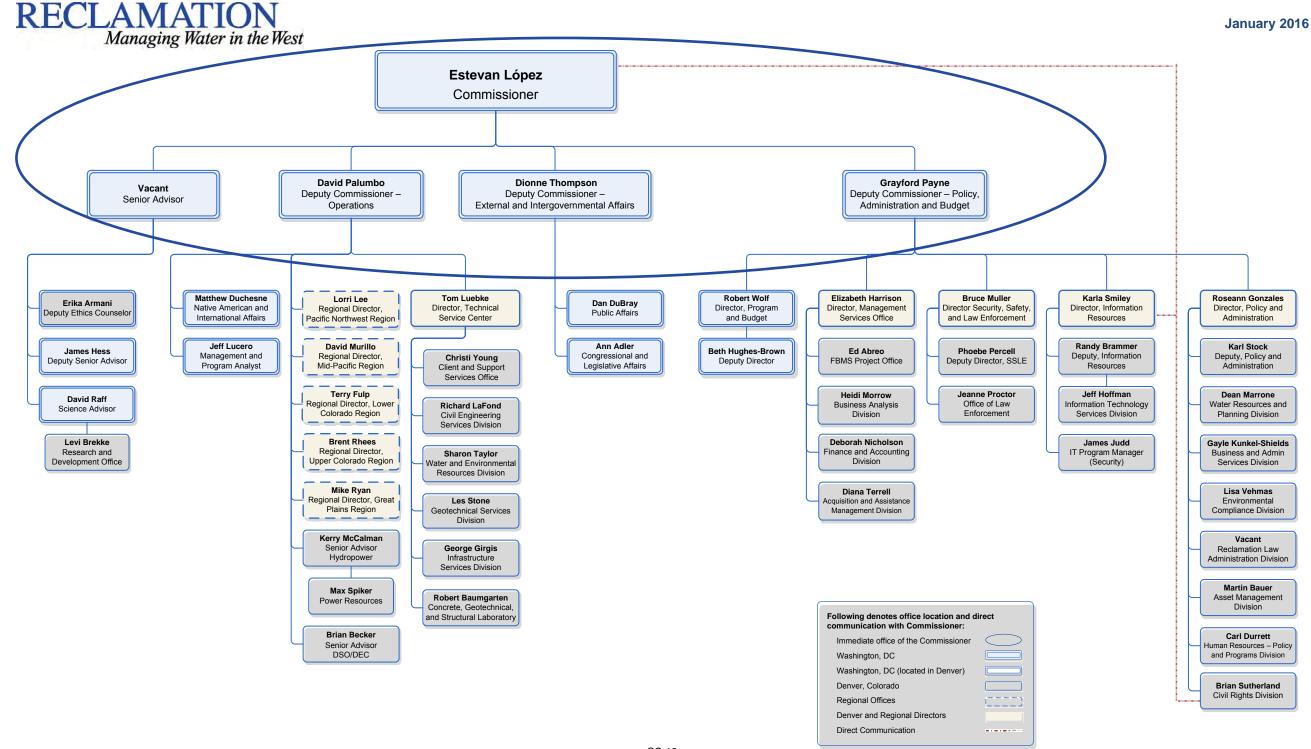


Commissioner's Office 1849 C Street, NW Washington, D.C. 20240

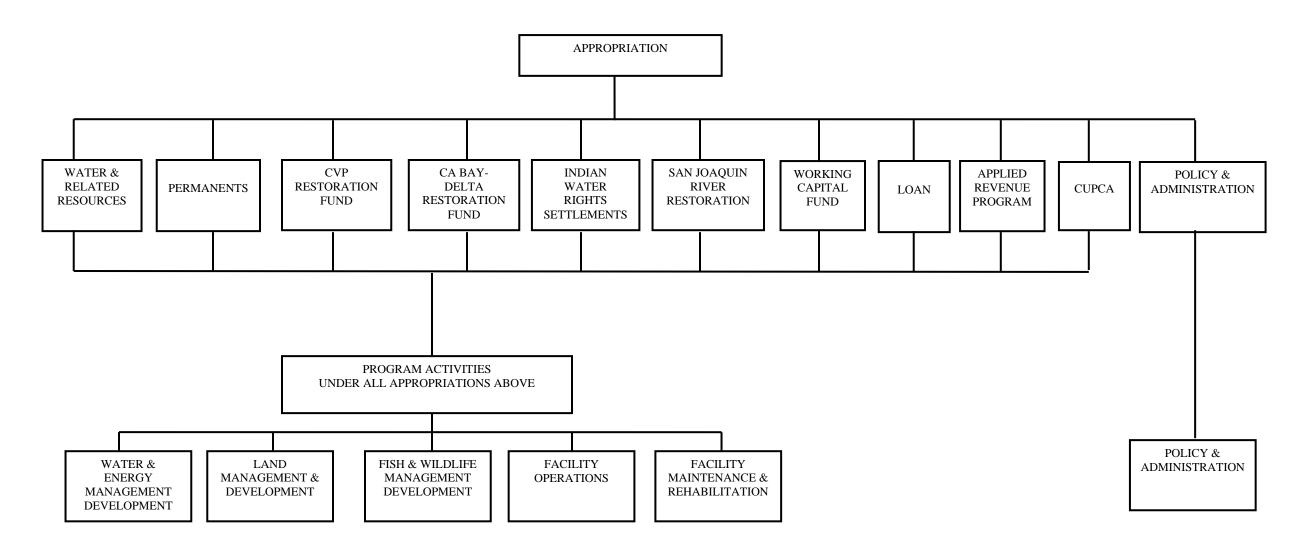
Great Plains Region 2021 4th Avenue North Billings, MT 59101 Denver Offices Denver Federal Center 6th and Kipling, Bldg 67 Denver, CO 80225

Lower Colorado Region 500 Fir Street Boulder City, NV 89006 Upper Colorado Region 125 South State Street, Room 6107 Salt Lake City , UT 84138

Federal Office Building 2800 Cottage Way Sacramento, CA 95825 Pacific Northwest Region 1150 North Curtis Road, Suite 100 Boise, Idaho 83706



DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION



Water and Related Resources Appropriation FY 2017 Overview

The 2017 budget for Water and Related Resources (W&RR), Reclamation's principal operating account, is \$813.4 million, a total of \$163.4 million less than the 2016 enacted level. This difference is due, in part, to the proposed separate Indian Water Rights Settlement Account (\$106.2 million) and a separate discretionary account within the San Joaquin Restoration Fund (\$36.0 million).

As the largest supplier and manager of water in the 17 Western States and the Nation's second largest producer of hydroelectric power, Reclamation's projects and programs are integral to driving and maintaining economic growth in hundreds of basins throughout the western States. Reclamation manages 475 dams and 337 reservoirs with the capacity to store 245 million acre-feet of water, manages water for agricultural, municipal and industrial use, and provides flood control risk reduction and recreation for millions of people. According to *The Department of the Interior's Economic Report Fiscal Year 2014*, Reclamation's activities, including recreation, contribute \$48.4 billion to the economy and support 360,895 jobs. Reclamation owns 76 hydroelectric power plants and operates and maintains 53 of those plants. The 53 hydroelectric power plants account for 15 percent of the hydroelectric generating capacity in the United States. Annually, Reclamation generates more than 40 billion kilowatt hours of electricity (enough to supply over 3.5 million U.S. households) and collects nearly \$1 billion in gross power revenues for the Federal government. It would take more than 23.5 million barrels of crude oil or about 6.8 million tons of coal to produce an equal amount of energy with fossil fuel plants. As a result, Reclamation's facilities preclude the production of over 27 million tons of carbon dioxide that would have been produced by fossil fuel power plants.

The 2017 budget allocates funds to projects and programs based on objective, performance-based criteria to most effectively implement Reclamation's programs and its management responsibilities for water and power infrastructure in the West. The 2017 budget emphasizes the following principles:

- *Shared Responsibility* Securing non-Federal cost-share partners to meet project or program funding needs, and leveraging funding through these collaborative partnerships.
- *Merit-Based Funding* Utilizing competitive processes for the awarding of grants, contracts, or other services based on criteria that reflect Interior priorities. Award selection is guided by high quality evidence-based research.
- Regional Equity Managing Reclamation's water infrastructure and programs by setting priorities on a West-wide basis.

W&RR-1

¹ Department of the Interior's 2014 Economic Contribution's Report – Summary of Bureaus Contributions, June 23, 2015. The Summary report is only available online at (http://www.doi.gov/ppa/economic_analysis/).

The following is a comparison of the 2017 Budget with the 2016 Enacted amount by the five programmatic activities:

Table 1: Water and Related Resources

(\$ in thousands)

Program Activity	FY 2016 Enacted ¹	FY 2017 Presidents Request ²
Water and Energy Management and Development	\$372,636	\$224,653
Water and Energy Management and Development (IWRS account) 2	[101,698] ²	[97,045]
Land Management and Development	37,636	38,173
Land Management and Development (IWRS account) ²	[8,453]	[7,138]
Fish and Wildlife Management and Development	121,152	120,711
Fish and Wildlife Management and Development (IWRS & SJRRP) ²	[37,322]	[37.968]
Facility Operations	249,728	250,443
Facility Maintenance and Rehabilitation	190,347	179,422
TOTAL Water and Related Resources (W&RR)	\$971,499	813,402
TOTAL (W&RR, IWRS, SJRRP) 1 The Consolidated Appropriations Act of 2016 provided Reclamation on ed	\$1,118,972	955,553

^{1/} The Consolidated Appropriations Act of 2016 provided Reclamation an additional \$166.3 million in six categories including Western Drought Response, (\$100 million), Rural Water (\$47 million), and four other categories. At the time of budget preparation, these funds had yet to be distributed by project or program.

The funding request for the three "Resources Management and Development" programmatic activities (i.e., Water and Energy Management and Development, Land Management and Development, and Fish and Wildlife Management and Development) is a total of \$148.0 million, or 28% less than FY 2016 enacted levels. This is calculated as if the San Joaquin and Indian Water accounts were to remain within W&RR, instead of in the separate accounts discussed on the previous page. The request for the "Operations Maintenance and Rehabilitation" activities (i.e., Facility Operations and Facility Maintenance and Rehabilitation) is \$10.2 million, or 2% less than FY 2016 enacted levels.

The funding proposed in Reclamation's 2017 Budget supports key program areas and projects important to the Department and is in line with Administration objectives. The budget sustains Reclamation's participation in efforts to address emerging water supply challenges in the West, to promote water conservation and improved water management, to facilitate the development of clean renewable hydropower in a sustainable manner, and to take actions to mitigate adverse environmental impacts of projects. The 2017 budget prioritizes funding to projects and programs that most effectively implement Reclamation's programs and its management responsibilities for its water and power resources in the West.

²/The FY 2017 amounts for the Indian Water Rights Settlements (IWRS) and San Joaquin River Restoration Program (SJRRP) and are provided in brackets for comparative purposes only, as these amounts were appropriated in the Water and Related Resources account in FY 2016, and are proposed in separate accounts for FY 2017.

Major initiatives include:

Support for Administration and Secretarial Initiatives:

The *Ensuring Healthy Watersheds and Sustainable*, *Secure Water Supplies Initiative* is accomplished through the WaterSMART (Sustain and Manage America's Resources for Tomorrow) Program. Federal leadership can help to achieve widespread acceptance and implementation of sustainable water development and management. At \$61.5 million, WaterSMART promotes resiliency through sustainable solutions and economic productivity in the Western United States. It addresses current and future water shortages; degraded water quality; increased demands for water from growing populations and energy needs; amplified recognition of environmental water requirements; and the potential for decreased water supply availability due to drought and a dynamic climate. The Department's WaterSMART Program also includes participation from the U.S. Geological Survey as well as coordination across all other Department of the Interior bureaus.

Secretarial Order 3297, issued in February 2010, established the WaterSMART Program to stretch and secure water supplies for future generations, calling for coordination across agencies, integration of energy and water policies, and ensuring the availability of sound science and information to support decisions on sustainable water supplies.

The WaterSMART Program includes funding for cost-shared grants for water and energy management improvement projects, basin-wide efforts to evaluate and address the impacts of climate variability, Title XVI Water Reclamation and Reuse projects, the establishment and expansion of collaborative watershed groups, smaller-scale water conservation activities through the Water Conservation Field Services Program (WCFSP); activities to incorporate climate change and sustainability considerations into decision making regarding investments in Federally owned infrastructure; and a comprehensive approach to drought planning and implementation actions that address water shortages.

Table 2: WaterSMART Program (\$ thousands)

Program	FY 2015 Enacted	FY 2016 Enacted	FY 2017 President's Request
WaterSMART Grants	\$23,500	\$20,000	23,365
Cooperative Watershed Management Program	250	250	1,750
Basin Studies	3,850	5,200	5,200
Drought Response (Climate)	5,000	2,500	4,000
Resilient Infrastructure (Climate)	1,500	2,500	1,500
Water Conservation Field Services Program (WCFSP)	4,457	4,239	4,179
Title XVI Projects	26,000	23,365	21,500
Program Total	\$64,557	\$58,054	\$61,494

The WaterSMART Program is directly aligned with the Department's Priority Goal for Water Conservation. Expected water savings from WaterSMART Grants, Title XVI, and the WCFSP—among other water conservation activities—that are funded with FY 2017 appropriations will contribute to the

Department's Priority Goal for Water Conservation. For additional information on the Priority Goal, please see the General Statement earlier in this Budget Justification document.

The programs included in WaterSMART are collaborative in nature and work across jurisdictional boundaries aid in achieving sustainable water management. For example, the Basin Study Program and the Cooperative Watershed Management Program incorporate a regional or watershed approach to address water management on a larger scale, and both programs require participation by diverse stakeholders. WaterSMART Grants, among other WaterSMART activities, address the link between energy and water. Through the program, Reclamation makes funding available for water efficiency improvements that result in lower energy consumption by reducing the amount of water that needs to be pumped or transported from distant sources. Other WaterSMART Grant projects install new hydroelectric turbine generators on canals and conduits, resulting in new sources of local renewable energy. Through the Drought Response Program, Reclamation provides cost-shared funding for the development of collaborative drought contingency plans with involvement from a wide range of stakeholders. Additionally, WaterSMART supports the assessment of current water supplies and demands, and impacts due to an altering climate through the use and development of sound science. The Basin Study Program - which includes Basin Studies, Landscape Conservation Cooperatives (LCCs), and West-Wide Climate Risk Assessments (WWCRAs) – represents a multi-pronged approach to developing landscape-level science, by communicating information and science to other entities and agencies, and working with stakeholders to develop adaptation strategies to cope with water supply and demand imbalances on a collaborative basis.

Through WaterSMART Grants, Reclamation will continue to help address western water issues and climate variability by providing cost-shared assistance on a competitive basis. Funding will be used primarily to carry out water and energy efficiency improvements, including projects that save water; increase energy efficiency and the use of renewable energy in water management; support environmental benefits (i.e., that make conserved water available in stream or otherwise address endangered species issues); facilitate and support water markets; and mitigate conflict risk in areas at a high risk of future water conflict. On-the-ground projects may also include implementation of climate adaptation strategies identified in a completed Basin Study. Other projects may result in water delivery improvements that facilitate future on-farm improvements, which can be carried out with the assistance of the Natural Resources Conservation Service to accomplish coordinated water conservation improvements. Projects that include multiple public benefits are given the greatest consideration for funding. In FY 2017, Reclamation will also make funding available for projects that facilitate and support water markets.

The Department will continue to provide financial assistance to establish and expand collaborative watershed groups through the Cooperative Watershed Management Program. In FY 2017, funding opportunity announcements will be used to continue to allocate program funding through a competitive process for the establishment or expansion of a watershed groups. Also in FY 2017, Reclamation will implement Phase II of this program by funding watershed management projects to improve the ecological resiliency of a river or stream.

Reclamation will also address impacts of an altering climate and water supply and demand imbalances through the Basin Study Program, which implements Section 9503 of the SECURE Water Act through a complementary set of activities, including: (1) Basin Studies, through which Reclamation will work with State and local partners to comprehensively identify strategies that address future water demands within a river basin; (2) West-Wide Climate Risk Assessments, which continue to provide consistent projections of risks to water supplies and demands and impacts to Reclamation operations due to the potential impacts of a changing climate across the major Reclamation river basins identified within the SECURE Water Act; and (3) Landscape Conservation Cooperatives, which are focused on working with partners to

identify shared science needs and meeting those needs through the development of applied science tools, collaboration, and information sharing to support resource management at the landscape scale.

Through the Resilient Infrastructure Program, Reclamation will prepare for new climate extremes and support healthy and resilient watersheds by advancing our scientific and technical capability to proactively maintain and improve existing infrastructure for system reliability, safety, and efficiency. The plan is for the new capability to be extrapolated to Reclamation's entire portfolio of projects. Reclamation will continue to identify opportunities to integrate operational efficiencies that are more compatible with climate variability adaptation goals, will utilize climate adaptation information to prioritize infrastructure replacement.

Through the Drought Response Program, Reclamation has implemented a comprehensive new approach to drought planning and is carrying out implementation actions to address water shortages. Funding for planning and implementation actions is allocated through a competitive process using an empirical approach that emphasizes involvement from multiple stakeholders and the incorporation of climate change information. These Comprehensive Drought Plans and Drought Resiliency Projects will help Reclamation avoid drought-related crises in the short term, while laying a foundation for climate resiliency in the long term. These efforts also directly support the National Drought Resilience Partnership, identified in the President's 2013 Climate Action Plan—helping communities manage drought and develop long-term resilience strategies, by providing key climate variability and drought information.

Through the WCFSP, Reclamation will continue to make cost-shared financial assistance available on a competitive basis at the area and regional office levels for smaller-scale water conservation activities, as well as technical assistance from Reclamation staff. Reclamation limits WCFSP awards to no more than \$100,000 in Federal funding per project. Funding Opportunity Announcements developed by Reclamation's regional offices incorporate uniform Reclamation-wide selection criteria. The WCFSP assists Reclamation in achieving the Water Conservation Priority Goal outlined in the Department's Strategic Plan.

The Title XVI Water Reclamation and Reuse Program also contributes to sustainable water conservation in the Western United States and is included in the WaterSMART Program. The Title XVI Program was authorized by P.L.102-575 in 1992, as amended. This program authorizes Reclamation to provide financial and technical assistance to local water agencies for the planning, design, and construction of water reclamation and reuse facilities, and to conduct research. Federal investments in Title XVI projects, including all projects funded since 1992, made available an estimated 369,000 acre-feet of water in 2015.

Authorized projects will be identified for funding through the use of programmatic criteria that are focused on helping to secure and stretch water supplies or addressing specific water supply issues in a cost-effective manner, addressing environmental and water quality concerns, and meeting other program goals. In FY 2017, Reclamation will also make funding available for competitively awarded research projects related to water recycling and reuse. Funding may also be used for the development of feasibility studies for potential new water reuse projects. Funding will also be used to continue general program administration such as collection of data on program accomplishments and coordination among regional offices for consistency.

Supporting the Administration's *America's Great Outdoors (Reclamation's Rivers Initiative)*. Ecosystem restoration is a key underpinning of Reclamation's mission. In order to meet Reclamation's mission goals, a part of its programs must focus on the protection and restoration of the aquatic and riparian environments influenced by its operations. These efforts help Reclamation balance its

environmental protection role as a water supplier and power generator, thus better positioning Reclamation to address the ongoing challenges presented by drought, climate variability adaptation, increasing populations, the growing water demand associated with energy generation, and environmental needs. The Administration's America's Great Outdoors (AGO) initiative within the Water and Related Resources Account is budgeted at \$95.0 million and involves a large number of activities including the Endangered Species Act recovery programs. Other AGO activities are funded within the San Joaquin River Restoration Fund and the Central Valley Project Restoration Fund.

The FY 2017 Budget provides \$110.7 million for operating, managing and improving California's *Central Valley Project* (CVP). Funding for CVP includes \$17.4 million for the Trinity River Division (of which \$11.8 million is associated with *AGO* -- Trinity River Restoration -- with an additional \$1.5 million through the CVP Restoration Fund). The Trinity River Restoration program includes development of a comprehensive monitoring and adaptive management program for fishery restoration and construction of channel rehabilitation projects at various sites along the Trinity River.

The budget includes \$27.4 million for the Lower Colorado River Operations Program (LCROP) to fulfill the role of the Secretary as Water Master for the lower Colorado River and implementation of the Lower Colorado River Multi-Species Conservation Program (LCR MSCP). Of this amount, \$10.5 million is for efforts associated with the development of the Annual Operating Plan for Colorado River reservoirs, management and oversight of the Long Range Operating Criteria for Colorado River Reservoirs, and the Colorado River interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Mead and Powell, including opportunities to address the water imbalance challenges and the potential solutions within the Basin. Of the \$10.5 million, \$800,000 is for activities related to compliance and monitoring of Minute 319 of the Bi-National Treaty with Mexico. Minute 319 is a five-year binational agreement between the United States and Mexico to protect against drought, enhance riparian and environmental resources and explore new water source projects in Mexico. Minute 319 and work with Mexico is identified in the Department of Interior's Strategic Plan as a top agency priority. Of the LCROP total, \$16.9 million is associated with AGO and will be used for the LCR MSCP and other fish and wildlife issues to provide quality habitat to conserve populations of 26 species. Augmenting the populations of razorback sucker and bonytail chub is a major component of the LCR MSCP. These population augmentations will provide the nucleus for stable populations reversing the declining trend. Species research will also provide the necessary information required to create and manage LCR MSCP covered species and their habitats. The long-term goal of the LCR MSCP is the recovery of listed species, which is believed to be best achieved though establishment and maintenance of native cottonwood and willow, marsh, and backwater habitat. Habitat will also require post-development monitoring. The LCR MSCP adaptive management process is intended to be a flexible, iterative approach to long term habitat creation and management of biological resources and will be influenced over time by the results of ongoing monitoring, research and other sources of information to gauge the effectiveness of existing conservation measures.

The *Klamath Project* budget is \$16.0 million and includes funds for studies and initiatives related to improving water supplies to address the competing demands of agricultural, tribal, wildlife refuge, and environmental needs.

The *Middle Rio Grande* project budget is \$25.9 million of which \$9.2 million is associated with *AGO* and will continue funding endangered species activities and Reclamation's participation in the Middle Rio Grande Endangered Species Act Collaborative Program. This funding will continue studies to assess the impact and/or effect of Reclamation operation and maintenance and other construction activities on the endangered Rio Grande Silvery minnow and southwestern willow flycatcher through coordination with Fish and Wildlife Service, New Mexico Department of Game and Fish, and other stakeholders.

The FY 2017 budget includes funding for *Endangered Species Programs* and activities that involve more than one Reclamation project. This includes continuing water conservation activities; providing and protecting in-stream flows; managing endangered species activities; habitat restoration and protection; research; planning and outreach; and construction of facilities to benefit fish and wildlife. The budget has \$27.3 million for Endangered Species Act Recovery Implementation programs. This includes \$19.9 million in the Great Plains Region to implement the Platte River Endangered Species Recovery Implementation program, based upon approval of the program by the Secretary and the Governors of Colorado, Nebraska, and Wyoming in late 2006 and authorized by the Consolidated Natural Resources Act of 2008. Implementation of this program provides measures to help recover four endangered or threatened species, thereby enabling existing water projects in the Platte River Basin to continue operations, as well as allowing new water projects to be developed in compliance with the Endangered Species Act. An increase of \$2.4 million in this project is to provide water service to the Platte River Program and Nebraska from the proposed J-2 Reservoir Project. This funding will allow Reclamation to receive water service to reduce shortages to U.S. Fish & Wildlife Service target flows by approximately 30,000 acre-feet per year.

The Endangered Species Program also provides \$4.9 million for the Upper Colorado and San Juan River Endangered Fish Recovery programs, which were established to provide habitat management, development and maintenance; augmentation and conservation of genetic integrity; and conservation of other aquatic and terrestrial endangered species. The following table shows funding for each Region's Endangered Species Conservation and Recovery Implementation activities. Additional funding for work to benefit endangered species is also found in other projects and programs within the Water and Related Resources appropriation.

Table 3: Endangered Species Conservation/Recovery Program(\$ in thousands)

Region	FY 2015 Enacted	FY 2016 Enacted	FY 2017 President's Budget
Pacific Northwest	\$300	\$300	\$300
Mid-Pacific	1,492	1,492	1,492
Lower Colorado	708	708	708
Upper Colorado	5,050	4,351	4,915
Great Plains	17,127	17,500	19,890
Total	\$24,677	24,351	\$27,305

The Columbia and Snake River Salmon Recovery Federal Columbia River Power System (FCRPS) Endangered Species Act (ESA) Implementation program budget of \$18.0 million will be used to implement multiple Biological Opinion (BiOp) actions. These mitigation actions allow continued operation of the FCRPS, including Grand Coulee and Hungry Horse dams, and continued compliance with the ESA. NOAA Fisheries FCRPS BiOp mitigation actions include: hydrosystem improvement actions for salmon including flow augmentation in the Columbia River; salmon hatchery improvements; avian predation reduction efforts; and Columbia River tributary habitat improvement actions for salmon, including water acquisitions to improve instream flows in tributaries. This program supports annual leasing and the potential permanent acquisition of water through state water banks from willing parties improving instream flows for salmon mitigation in the Snake River.

The Yakima River Basin Water Enhancement Project budget of \$15.8 million will continue to address water supply shortages by evaluating and implementing structural and nonstructural measures to increase the reliability of the irrigation water supply and enhance stream flows and fish passage for anadromous fish in the Yakima River Basin. Construction of the Cle Elum Dam Fish Passage is being funded jointly by Reclamation and the State of Washington through a memorandum of understanding. Cle Elum Dam fish passage contributes towards Reclamation's obligation for fish passage in accordance with the Yakama Nation Settlement Agreement.

In support of the Department's <u>Powering Our Future</u> initiative and the Renewable Energy priority goal, the FY 2017 Reclamation budget request includes \$1.3 million to implement an automated data collection and archival system to aid in hydropower benchmarking, performance testing and strategic decision making, investigate Reclamation's capability to help integrate other renewable resources such as wind and solar into the electric grid; and to work with Tribes to assist them in developing renewable energy sources. These important projects will assist in the production of cleaner, more efficient renewable energy.

<u>Strengthening Tribal Nations</u> – Reclamation's efforts to empower tribal nations are long standing and range from endangered species restoration to rural water and implementation of water rights settlement actions. Funding to empower tribal nations is included within a number of projects; examples include:

The Ak Chin Water Rights Settlement Act Project budget of \$15.7 million facilitates delivery of Colorado River water through the Central Arizona Project to 16,000 acres of irrigated lands on the Ak-Chin Indian Reservation.

The *Native American Affairs Program* budget of \$10.4 million continues support for Reclamation activities with Indian Tribes. These activities include providing technical support for Indian water rights settlements, and to assist tribal governments to develop, manage and protect their water and related resources. The office also provides policy guidance for Reclamation's work with Tribes throughout the organization in such areas as the Indian trust responsibility, government-to-government consultation, and Indian self-governance and self-determination

The FY 2017 budget continues the implementation of two of the *Indian Water Rights Settlements* enacted in December 2010 (Crow and Aamodt) and the 2009 authorized Navajo-Gallup Water Supply Project through the Indian Water Rights Settlements account proposed in the President's budget for FY 2017. A description of the Navajo-Gallup Water Supply Project, and the other four (including White Mountain Apache and Taos projects) Indian Water Rights Settlements projects established by P.L. 111-291, Claims Resolution Act of 2010, can be found in the Indian Water Rights Settlement Account section of Reclamation's Budget Justification documents.

Additionally, the Columbia/Snake River Salmon Recovery; Klamath, Trinity River Restoration Program within the Central Valley Project, Yakima River Basin Water Enhancement Project, and four of the six authorized rural water projects (discussed below) benefit tribal nations.

Other Budget Highlights:

The FY 2017 Reclamation Budget has \$38.1 million for ongoing authorized <u>Rural Water Projects</u>. Millions of Americans still live without safe drinking water. Congress has specifically authorized Reclamation to undertake the design and construction of six projects intended to deliver potable water supplies to specific rural communities located primarily in Montana, New Mexico, North Dakota, and

South Dakota. The projects that benefit tribal nations include: the Mni Wiconi Project (South Dakota), the rural water component of the Pick Sloan-Missouri Basin Program - Garrison Diversion Unit (North Dakota), the Fort Peck Reservation/Dry Prairie Rural Water System (Montana), and Rocky Boy's/North Central Rural Water System (Montana). Construction has been completed in the Mni Wiconi project and the project is now in operation and maintenance status. Other rural water projects include: Lewis and Clark Rural Water System (South Dakota, Minnesota, Iowa), and Eastern New Mexico Water Supply (New Mexico).

Reclamation has applied prioritization criteria for use in the budget formulation process to determine the amounts that will be requested for construction. The Interim Final Criteria have been applied in FY 2016 and include the following categories: 1) financial resources committed, 2) urgent and compelling need, 3) financial need and regional economic impacts, 4) regional and watershed nature, 5) meets water, energy and other priority objectives, and 6) serves Native Americans. The funds requested by Reclamation for rural water construction in FY 2016 were formulated using these criteria and in consideration of Reclamation-wide priorities.

Table 4: Rural Water Projects (\$ in thousands)

Program ¹	Region	FY 2015 Enacted	FY 2016 Enacted ²	FY 2017 President's Budget
Mni Wiconi Project	GP	12,000	12,000	12,200
Pick-Sloan Missouri Basin Program - Garrison Diversion Unit (Rural Water component only)	GP	22,596	13,400	13,810
Rocky Boy's/North Central MT Rural Water System	GP	10,891	4,625	3,700
Fort Peck Reservation/Dry Prairie Rural Water System	GP	9,849	3,700	4,625
Jicarilla Apache Rural Water System	UC	0	0	0
Lewis and Clark Rural Water System	GP	9,000	2,774	2,775
Eastern New Mexico Water Supply – Ute Reservoir	UC	747	47	1,000
Rural Water -Undistributed		$[31,000]^3$	47,000	
Rural Water Programs – Total		65,083	83,546	38,110

This table primarily represents construction funding; however, it includes operations and maintenance funding for Mini Wiconi project (\$12.2 million) and for Garrison's rural water component of the project (\$6.4 million), which is requested in the Pick-Sloan Missouri Basin Program, Garrison Project.

The FY 2017 budget of \$26.2 million for *Site Security* is to ensure the safety and security of the public, Reclamation's employees and key facilities. This funding covers Bureau-wide security efforts including physical security upgrades at critical assets; law enforcement; risk and threat analysis; personnel security; information security; security risk assessments, security-related studies; guards and patrols, and operation and maintenance costs that exceed the reimbursability ceiling.

^{2/} The Consolidated Appropriations Act of 2016, provided Reclamation an additional \$166.3 million in six categories including rural water (\$47.0 million). At the time of budget preparation, these funds had yet to be distributed by program.

^{3/} For comparative purposes only, the Appropriations Act of 2015, provided Reclamation an additional \$31 million in for rural water projects which was distributed by the program and included in project funding numbers shown in the FY 2015 enacted column.

Section 513 of the Consolidated Natural Resources Act of 2008 (P.L. 110-229) includes provisions for the treatment of Reclamation Site Security Costs. Under these provisions, Reclamation will collect approximately \$14.9 million for security-related operation and maintenance costs that are reimbursable under Reclamation law. Approximately 60 percent of this amount is reimbursable through up-front revenues. Approximately 40 percent of this amount is appropriated and then reimbursed to projects through the normal O&M cost allocation process.

<u>Funding Partnerships</u> – Reclamation continues efforts to reach agreements with non-Federal and Federal partners to share in the cost of water resource management and development. Cost-sharing of 50 percent for construction and rehabilitation of recreation facilities at various Reclamation reservoirs will continue.

Reclamation's current planning program seeks 50 percent cost-sharing on most studies. This reflects Reclamation's emphasis on partnerships for water management initiatives wherein solutions are focused on more efficient management of water resources rather than facility development.

The *Bonneville Power Administration* will continue to provide up-front financing of power operation and maintenance and for major replacements and additions for the power plants at the Boise, Columbia Basin, Hungry Horse, Minidoka, Rogue River, and Yakima projects (see the following table).

Table 5: Bonneville Power Administration (\$ in thousands)

Project	Power O&M FY 2016	Small Capital Replacements & Additions FY 2016	Major Replacements & Additions FY 2016	Power O&M FY 2017	Small Capital Replacements & Additions FY 2017	Major Replacements & Additions FY 2017
Boise Area	\$5,647	\$275	\$1,871	\$5,860	\$339	\$1,116
Columbia Basin	123,487	4,000	38,177	127,154	4,000	64,517
Hungry Horse	9,263	213	1,913	7,889	2,065	2,177
Minidoka Area	12,549	310	5,750	10,683	363	1,720
Rogue River	1,138	550	1,429	1,328	135	50
Yakima	3,188	175	1,160	3,207	105	0
TOTAL	\$155,272	\$5,523	\$50,300	\$156,121	\$7,007	\$69,580

A long-term funding agreement with the customers of the *Parker-Davis Project* was executed in FY 1999. The FY 2016 costs of operation, maintenance and replacement for this project are 100 percent up-front funded by the customers. The customers provide input into the planning and funding of the project in meetings with Reclamation.

A partnership for the LCR MSCP was signed with partners in Arizona, California, and Nevada and the funding and management agreement was executed in April 2005, providing for a 50/50 non-Federal/Federal cost-share.

In the Mid-Pacific Region, Reclamation partnered with the power customers and established an agreement to advance fund the power Operation and Maintenance (O&M) program with the objective of properly maintaining the *Central Valley Project* (CVP) facilities through an adequate and reliable source

of funding. To date, the CVP power O&M program is funded 100 percent by the customers, in addition to funding selected Replacements, Additions and Extraordinary (RAX) items.

In the Great Plains (GP) Region, Reclamation, Western Area Power Administration, and the U.S. Army Corps of Engineers have entered into an agreement which enables the GP Region power customers to voluntarily direct fund a portion of power RAX items. The FY 2016 budget provided for \$29.57 million for up-front funded power maintenance and rehabilitation from power customers.

<u>Dam Safety Program</u> – The safety and reliability of Reclamation dams is one of Reclamation's highest priorities. The Dam Safety Program is critical to effectively manage risks to the downstream public, property, project, and natural resources.

The budget of \$86.1 million for the Safety of Dams Evaluation and Modification Program provides for risk management activities at 366 of Reclamation's dams and dikes where loss of life would likely occur if the dam were to fail. Folsom Dam is Reclamation's highest priority dam safety project and activities will be ongoing in FY 2017. The budget includes preconstruction and construction activities for several dam modifications planned for the through the Dam Safety Program. In addition, funding is included in the budget for the Department of the Interior Dam Safety Program.

Reclamation utilizes the Safety of Dams Act to address dam safety issues related to new hydrologic, seismic or change in state-of-the-art design and construction practices. Approximately 50 percent of Reclamation's dams were built between 1900 and 1950, and approximately 90 percent of the dams were built before currently used state-of-the-art design and construction practices were put in place. Continued safe performance is a greater concern with dams and requires a greater emphasis on the risk management activities provided by the program.

<u>Science and Technology Program (S&T)</u> — The S&T Program is an applied Research and Development (R&D) program that addresses the full range of technical issues confronting Reclamation water and power managers and their project stakeholders. S&T Program projects typically have strong cost-sharing and collaboration across stakeholders, other agencies, universities, and Reclamation's technical experts and resource managers. The funding is awarded in four domains:

- Conserving or Expanding Water Supplies
- Water and Power Infrastructure Reliability
- Environmental Issues in Water Delivery and Management
- Water Operations Decision Support

The FY 2017 request at \$22.8 million includes \$8.5 million to support water and power technology prize competitions (challenges), to initiate a grand-scale technology prize competition focused on next-generation advanced water treatment technologies that would significantly reduce the cost and electricity usage of advanced water. The request also includes \$2 million for the Open Water Data Initiative to continue efforts to make Reclamation's water and related data better managed, more comparable across locations, and more easily shareable with other agencies, stakeholders, and the public. The program plans to support continued research and development projects, technology transfer, and dissemination/outreach activities addressing critical water and power management technical obstacles in water management, hydropower generation, infrastructure management, and environmental stewardship.

<u>Desalination and Water Purification Research Program (DWPR)</u> – The DWPR Program supports desalination research and development for the purpose of converting unusable waters into useable water supplies. Expanding water supplies through advanced water treatment is also central to a strong portfolio of adaptation tools that water managers need to adapt to changes in water availability. Program funds are

awarded as financial assistance through competitive, merit-based, cost-shared cooperative agreements with universities, public, and private sector research organizations.

The FY 2017 request at \$5.8 million includes funding for increased funding opportunities designed to support a greater number of laboratory scale research studies, to support new and ongoing pilot-scale projects, and to facilitate the adoption, testing and use of new clean water technologies that are in the maturation stage. Funding also supports the operation and maintenance of Reclamation's Brackish Groundwater National Desalination Research Facility (BGNDRF), which will support testing of brackish desalination pilot plants studying renewable energy, small scale systems, and concentrate disposal.

Replacement, Additions, and Extraordinary Maintenance (RAX) activities - The proposed budget also includes \$42.5 million in appropriations for various projects for Replacement, Additions, and Extraordinary Maintenance (RAX) activities across Reclamation. This budget is central to mission objectives of operating and maintaining projects to ensure delivery of water and power benefits. Reclamation's RAX budget is part of its overall Asset Management Strategy that relies on condition assessments, condition/performance metrics, technological research and deployment, and strategic collaboration to continue to improve the management of its assets and deal with its aging infrastructure challenges. This table represents only the FY 2017 budget for discretionary appropriations. Additional RAX items are directly funded by revenues, customers, or other Federal agencies (e.g., Bonneville Power Administration).

<u>Table 6: Replacements, Additions and Extraordinary Maintenance Activities^{1/}</u> (\$ in thousands)

Docion	FY 2015 Enacted ¹	FY 2016 Enacted ²	FY 2017
Region			President's Budget
Pacific Northwest	\$8,967	\$8,400	\$7,000
Mid-Pacific	19,781	\$21,472	\$17,622
Lower Colorado	13,481	8,938	8,491
Upper Colorado	1,000	0	0
Great Plains	8,375	9,500	9,413
Undistributed		2,300	
	\$51,604	\$50,610	\$42,526

¹ The Consolidated Appropriations Act of 2016 provided Reclamation an additional \$166.3 million in six categories including facility operations and maintenance (\$2.3 million). At the time of budget preparation, these funds had yet to be distributed by program.

Review of Projects with Multi-year Funding Budgets above \$10 Million – Reclamation has a material oversight process to review multi-year construction project cost estimates. The objective of this review is to assure that cost estimates are appropriate and accurately conducted and described. Reclamation will remain vigilant in ensuring that cost estimates of construction projects stay within projections and seek appropriate cost share.

Bay-Delta Authorization - California Bay-Delta Restoration is authorized by the Water Supply Reliability, and Environmental Improvement Act., October 25, 2008, P.L. 108-361. Authorization was extended through FY 2016 by Division D, Section 205 of P.L. 113-235, the Consolidated and Further Continuing Appropriations Act, 2015, and Consolidated Appropriations Act, 2016, December 18, 2015. Language is included in the 2017 President's Budget to extend the expiration date for the expiring authorities and appropriations to September 30, 2018.

Appropriation Ceilings -

Section 9504(e) of the SECURE Water Act, Subtitle F of Title IX of P.L. 111-11, the Omnibus Public Land Management Act of 2009, as amended, authorized \$350 million to carry out financial assistance agreements for water management improvements. Reclamation estimates that approximately \$115 million of the authorized appropriations ceiling remained after FY 2015. Reclamation will update this estimate once additional FY 2016 funding provided by Congress has been allocated to specific programs. Language is included in the FY 2017 Budget to increase the authorized appropriations ceiling by \$50 million to a total of \$400 million.

Section 301 of the Reclamation States Emergency Drought Relief Act of 1991 (43 U.S.C. 2241) authorized \$90 million to carry out drought emergency assistance activities. Reclamation estimates that approximately \$12.5 million of the authorized appropriations ceiling remained after FY 2015. Reclamation will update this estimate once additional FY 2016 funding provided by Congress has been allocated to specific programs.

The following would require legislation to increase appropriation ceilings before they could be completed as authorized:

- *Central Valley Projects* (CVP):
 - o Auburn-Folsom South Unit
 - o San Felipe Division
 - o West San Joaquin Division, San Luis Unit
- Colorado River Basin Salinity Control Program Title II
 - O This authorization (with indexing) is adequate to complete about 70 percent of the Basinwide Program goal as currently proposed. Appropriate congressional committees will be advised of the ceiling status for the Title II Program as necessary. Legislation to provide additional appropriation ceiling may be needed to complete the Title II Program as authorized. Current commitments will be held within the existing ceiling.

Current commitments will be held within the existing appropriation ceilings.

Existing policies require that individual ceiling components and project units be indexed, reviewed, and reported to Congress, as necessary. Appropriation ceilings without specific breakdowns to project units have been divided into major project units and reported accordingly.

	1		FY 2016		FY 2017	
				President's	Other Fed/	Total
Project/Program	Region	States	Enacted 1/	Budget	Non-Fed	Program
	8					8
Ak Chin Indian Water Rights Settlement Act Project	LC	AZ	15,341	15,735		15,735
Animas-La Plata Project, Colorado River Storage Participating Project	UC	CO	2,892	2,652		2,652
Arbuckle Project	GP	OK	274	238	10	248
Balmorhea Project	UC	TX	40	40		40
Boise Area Projects	PN	ID	4,909	4,671	8,113	12,784
Cachuma Project	MP	CA	1,321	1,321		1,321
Canadian River Project	GP	TX	171	219		219
Carlsbad Project	UC	NM	4,139	4,139	63	4,202
Central Valley Project:						
American River Division, Folsom Dam Unit/Mormon Island (SOD)	MP	CA	10,715	10,465	6,124	16,589
Auburn-Folsom South Unit	MP	CA	2,219	2,091		2,091
Delta Division	MP	CA	11,229	10,979		10,979
East Side Division	MP	CA	4,062	3,934	2,100	6,034
Friant Division:	7.00	G 4	5 502	- 4		5 4 C 5
Friant Division	MP	CA	5,593	5,465		5,465
San Joaquin River Restoration ^{2/}	MP	CA	35,000	0		0
Miscellaneous Project Programs	MP	CA	8,050	9,043	46,106	55,149
Replacements, Additions, and Extraordionary Maint. Program	MP	CA	20,262	16,362	10,000	26,362
Sacramento River Division	MP	CA	2,251	2,001		2,001
San Felipe Division	MP	CA	447	346		346
San Joaquin Division	MP	CA	52	52	2,300	2,352
Shasta Division	MP	CA	9,378	9,250		22,250
Trinity River Division	MP	CA	17,486	17,355		24,395
Water and Power Operations	MP	CA	14,782	14,532	7,881	22,413
West San Joaquin Division, San Luis Unit	MP	CA	<u>16,500</u>			<u>8,872</u>
Central Valley Project subtotal			158,026	110,747	94,551	205,298
Collbran Project	UC	CO	1,921	2,189		2,189
Colorado River Basin Project - Central Arizona Project	LC	AZ	7,078	6,920	177	7,097
Colorado River Basin Salinity Control Project - Title I	LC	AZ	14,170	15,453		15,453
Colorado River Basin Salinity Control Project, Title II - Basinwide Prog.	UC	CO	8,423	8,162	3,498	11,660
Colorado River Front Work and Levee System	LC	AZ	2,303	2,303		2,303
Colorado River Water Quality Improvement Program	UC,LC GP	Various	620	620	4 705	620
Colorado-Big Thompson Project Columbia and Snake River Salmon Recovery Project	PN	CO ID	13,937 18,000	16,756 18,000	4,795	21,551 18,000
Columbia Basin Project:	PIN	ID	18,000	18,000		18,000
Columbia Basin Project (Ephrata)	PN	WA	5,060	4,695	2.472	7 167
Columbia Basin Project (Ephrata) Columbia Basin Project (Grand Coulee)	PN	WA	9,750	9,567	2,472 206,028	7,167 215,595
Columbia Basin Project (Grand Codiee) Columbia Basin Project subtotal	FIN	WA	14,810	14,262	208,500	222,762
Crooked River Project	PN	OR	792	800	208,300	1,001
Colorado River Storage Project (CRSP), Section 5	UC	Various	9,671	10,435		13,489
Colorado River Storage Project (CRSP), Section 8	UC	Various	2,250	2,765	3,034	2,765
Dam Safety Program:	00	v arrous	2,230	2,703		2,703
Department of the Interior Dam Safety Program	Bureauwide	Various	1,300	1,300		1,300
Initiate Safety of Dams Corrective Action	Bureauwide	Various	66,500	64,500		64,500
Safety Evaluation of Existing Dams	Bureauwide	Various	20,284	20,284		20,284
Dam Safety Program subtotal	Darouu wiuc	, arrous	88,084	86,084	0	86,084
Deschutes Project	PN	OR	583	572	40	612
Eastern Oregon Projects	PN	OR	731	758	135	893
Emergency Planning and Disaster Response Program	Bureauwide	Various	1,250	1,250		1,250
Endangered Species Recovery Implementation Program	Bureauwide	Various	24,351	27,305	19,522	46,827
Environmental Program Administration	Bureauwide	Various	1,720	1,828	,022	1,828
Examination of Existing Structures	Bureauwide	Various	8,809	8,854		8,854
Fruitgrowers Dam Project	UC	CO	239	237		237
Fryingpan-Arkansas Project	GP	CO	12,024	12,715	80	12,795
Fryingpan-Arkansas Project - Arkansas Valley Conduit	GP	CO	500			3,000
General Planning Activities	Bureauwide	Various	2,000	2,000		2,000
Grand Valley Unit, CRBSCP, Title II	UC	CO	3,209	1,951		2,578
Hungry Horse Project	PN	MT	422	508		12,639
Huntley Project	GP	MT	57	63	· · · · · · · · · · · · · · · · · · ·	63
			57	0.5	l .	0.5

			FY 2016		FY 2017	
				President's	Other Fed/	Total
Project/Program	Region	States	Enacted 1/	Budget	Non-Fed	Program
Hyrum Project	UC	UT	355	354		354
Indian Water Rights Settlements: 3/						
Aamodt Indian Water Rights Settlement	UC	NM	6,000	0		0
Crow Tribe Water Rights Settlement	GP	MT	12,772	0		0
Navajo Gallup Water Supply	UC	NM ,TX	89,663	0		0
Taos Pueblo Indian Water Rights Settlement	UC	NM	4,048	0		0
Indian Water Rights Settlements subtotal	LC,UC,GP	Various	112,483	0	0	0
Kendrick Project	GP	WY	4,654	3,798	88	3,886
Klamath Project	MP	OR	18,000	16,000	1,500	17,500
Lahontan Basin Project (Humbolt, Newlands, and Washoe Projects)	MP	NV	9,801	9,851	200	10,051
Lake Mead/Las Vegas Wash Program	LC	NV	700	700		700
Lake Tahoe Regional Development Program	MP	CA	115	115		115
Land Resources Management Program	Bureauwide	Various	9,188	9,813		9,813
Leadville/Arkansas River Recovery Project	GP	CO	1,958	1,914		1,914
Lewiston Orchards Project	PN	ID	642	3,605	25	3,630
Lower Colorado River Operations Program	LC	Various	28,345	27,433	16,851	44,284
Lower Rio Grande Water Conservation Project	GP	TX	50	50	2,000	2,050
Lower Yellowstone Project	GP	ND	380	380		380
Mancos Project	UC	CO	283	298	13	311
McGee Creek Project	GP	OK	942	984	84	1,068
Mid-Dakota Rural Water Project	GP	SD	15	15		15
Middle Rio Grande Project	UC	NM	23,991	25,865	1,425	27,290
Milk River Project/St. Marys Storage Division	GP	MT	2,035	1,696	798	2,494
Minidoka Area Projects	PN	ID	4,618	4,800	14,558	19,358
Mirage Flats Project	GP	NE	123	111		111
Miscellaneous Flood Control Operations	Bureauwide		817			819
Moon Lake Project	UC	UT	95	93		93
Mountain Park Project	GP	OK	612	686	44	730
Native American Affairs Program	Bureauwide	Various	10,925	10,425		10,425
Negotiation and Administration of Water Marketing	Bureauwide	Various	1,728	1,764		1,764
Newton Project	UC	UT	125	124		124
Norman Project	GP	OK	351	369	30	399
North Platte Project	GP	WY	1,395	1,358	442	1,800
Nueces River Project	GP	TX	912	816	35	851
Ogden River Project	UC	UT	484	474		474
Operation and Program Management	Bureauwide	Various	2,509	2,788		2,788
Orland Project	MP	CA	930	930	1 110	930
Paradox Valley Unit, CRBSCP, Title II	UC	CO	3,972	3,399	1,110	4,509
Parker-Davis Project	LC	Various	102	0	15,297	15,297
Pine River Project	UC	СО	493	444		444
Pick-Sloan Missouri Basin Program (P-SMBP): Ainsworth Unit, P-SMBP	GP	NE	179	173	40	213
,	GP	KS	536	514	25	539
Almena Unit, P-SMBP Angostura Unit, P-SMBP	GP	SD	999	968	220	1,188
Armel Unit, P-SMBP	GP	CO	382	485	220	`
,		SD			224	485
Belle Fourche Unit, P-SMBP	GP		1,276	1,295	224	1,519
Bostwick Unit, P-SMBP	GP	NE/KS	1,254	1,259	542	1,801
Boysen Unit, P-SMB	GP	WY WY	2,059	2,103	220	2,323
Buffalo Bill Dam Modification, P-SMBP	GP GP	MT	2,701	2,779 5,688	702	2,803 6,390
Canyon Ferry Unit, P-SMBP Cedar Bluff Unit, P-SMBP	GP	KS	6,514 582	581	25	606
Dickinson Unit, P-SMBP	GP	ND	605	781	15	796
East Bench Unit, P-SMBP	GP	MT	863	854	190	1,044
·	GP	NE	2,400	2,167	230	,
Frenchman-Cambridge Unit, P-SMBP Garrison Diversion Unit, P-SMBP (Non-Rural Water)	GP	NE ND	9,749	9,718	230	2,397 9,718
	GP	KS		1,303	15	
Glen Elder Unit, P-SMBP Heart Butte Unit, P-SMBP	GP	ND	1,224 1,278	,	45 72	1,348 1,101
Helena Valley Unit, P-SMBP Helena Valley Unit, P-SMBP			· · · · · · · · · · · · · · · · · · ·			
Kansas River Area, P-SMBP	GP GP	MT	183	174	11	185
Kansas Kiver Area, P-SMBP	GP	Various	100	100		100

			FY 2016		FY 2017	
				President's	Other Fed/	Total
Project/Program	Region	States	Enacted 1/	Budget	Non-Fed	Program
Keyhole Unit, P-SMBP	GP	WY	767	775	198	973
Kirwin Unit, P-SMBP	GP	KS	444	509	20	529
Lower Marias Unit, P-SMBP	GP	MY	1,715	1,738	20	1,758
Missouri Basin O&M, P-SMBP	GP	Various	1,297	1,301		1,301
Narrows Unit, P-SMBP	GP	CO	36	36	5	41
North Loup Unit, P-SMBP	GP	NE	231	210	45	255
North Platte Area, P-SMBP	GP	WY	5,123	5,229	37	5,266
Oahe Unit, P-SMBP	GP	SD	94	107		107
Owl Creek Unit, P-SMBP	GP	WY	102	111		111
Rapid Valley Unit, Pactola, P-SMBP	GP	SD	195	195		195
Riverton Unit, Pilot Butte, P-SMBP	GP	WY	663	574	0	574
Shadehill Unit, P-SMBP	GP	SD	544	531	75	606
Webster Unit, P-SMBP	GP	KS	1,641	505		505
Yellowtail Unit, P-SMBP	GP	MT/WY	<u>7,089</u>	<u>6,802</u>	<u>227</u>	<u>7,029</u>
Pick-Sloan Missouri Basin Program (P-SMBP) subtotal			52,825	50,594	3,212	53,806
Power Program Services	Bureauwide	Various	2,698	2,698		2,698
Preston Bench	UC	ID	12	12		12
Provo River Project	UC	UT	1,738	1,751	870	2,621
Public Access and Safety Program	Bureauwide	Various	802	799		799
Rapid Valley Project	GP	SD	69	69	26	95
Reclamation Law Administration	Bureauwide	Various	2,323	2,189		2,189
Recreation and Fish and Wildlife Program Administration	Bureauwide	Various	2,202	2,189		2,189
Research and Development:	D	** '	2 455	5 000		5 002
Desalination and Water Purification Prog.	Bureauwide	Various	3,455	5,803		5,803
Science and Technology Program	Bureauwide	Various	<u>16,565</u>	<u>22,765</u>	0	<u>22,765</u>
Research and Development subtotal	LIC	NIM	20,020	28,568	492	28,568
Rio Grande Project Rio Grande Pueblos	UC UC	NM NM	7,406 300	5,406 300	483	5,889 300
Rogue River Basin Project, Talent Division	PN	OR	3,071	2,837	2,043	4,880
Rural Water Programs:	FIN	OK	3,071	2,837	2,043	4,880
Eastern New Mexico Water Supply - Ute Reservoir	UC	NM	47	1,000	1,500	2,500
Fort Peck Reservation / Dry Prairie Rural Water System	GP	MT	3,700	4,625	1,500	4,625
Lewis and Clark Rural Water System	GP	Various	2,774	2,775		2,775
Mni Wiconi Project	GP	SD	12,000	12,200		12,200
Rocky Boys/North Central MT Rural Water System	GP	MT	4,625	3,700		3,700
P-SMBP - Garrison Diversion Unit (Rural Water)	GP	ND	13,400	13,810		13,810
Rural Water Programs subtotal	<u> </u>	112	36,546	38,110	1,500	39,610
Salt River Project	LC	AZ	899	899	207	1,106
Salton Sea Research Project	LC	CA	300	300	0	300
San Angelo Project	GP	TX	590	635	20	655
San Carlos Apache Tribe Water Settlement Act Project	LC	AZ	150	1,550	0	1,550
San Luis Valley Project (Closed Basin Division)	UC	CO	3,944	3,923		3,923
San Luis Valley Project (Conejos Division)	UC	CO	<u>56</u>	<u>77</u>		<u>77</u>
San Luis Valley Project subtotal	UC	CO	4,000	4,000	0	4,000
Sanpete	UC	UT	70	70		70
Scofield Project	UC	UT	693	615		615
Shoshone Project	GP	WY	801	829	82	911
Sierra Vista Subwatershed Feasibility Study	LC	AZ	2	0	0	0
Site Security Activities	Bureauwide	Various	26,220	26,220	14,889	41,109
Solano Project	MP	CA	3,696	3,696		3,696
Southern Arizona Water Rights Settlement Act Project	LC	AZ	0	0	5,270	5,270
Strawberry Valley Project	UC	UT	930	605		605
Sun River Project	GP	MT	406	413		413
Tualatin Project	PN	OR	424	590	300	890
Tucumcari Project	UC	NM	26	23		23
Umatilla Project	PN	OR	2,990	2,850	134	2,984
Uncompangre Project	UC	СО	1,042			997
United States/Mexico Border Issues - Technical Support	UC	Various	90	90		90
Upper Colorado River Operations Program	UC	CO	270	270		270
Ventura River Project	MP	CA	346	346		346

			FY 2016		FY 2017	
				President's	Other Fed/	Total
Project/Program	Region	States	Enacted 1/	Budget	Non-Fed	Program
W.C. Austin Project	GP	OK	688	598	25	623
Washington Area Projects	PN	WA	475	523	0	523
Washita Basin Project	GP	OK	1,243	1,250	154	1,404
WaterSMART Program:						
WaterSMART Grants	Bureauwide	Various	20,000	23,365		23,365
Cooperative Watershed Management	Bureauwide	Various	250	1,750		1,750
Water Conservation Field Services Program	Bureauwide	Various	4,239	4,179		4,179
Title XVI Water Reclamation and Reuse Projects	Bureauwide	Various	23,365	21,500		21,500
Basin Studies	Bureauwide	Various	5,200	5,200		5,200
Resilient Infrastructure Investments	Bureauwide	Various	2,500	1,500		1,500
Drought Response and Comprehensive Drought Plans	Bureauwide	Various	<u>2,500</u>	<u>4,000</u>		<u>4,000</u>
WaterSMART Program subtotal			58,054	61,494	0	61,494
Weber Basin Project	UC	UT	2,122	2,060		2,060
Weber River Project	UC	UT	148	146		146
Wichita Project (Cheney Division)	GP	KS	514	531	80	611
Wichita Project (Equus Beds Division)	GP	KS	0	0		0
Yakima Project	PN	WA	7,571	6,344	5,495	11,839
Yakima River Basin Water Enhancement Project	PN	WA	12,811	15,799	6,856	22,655
Yuma Area Projects	LC	AZ	25,964	26,314	719	27,033
Other Funding Provided by P.L 114-113: 1/						
Rural Water Construction			47,000			
Fish Passage and Fish Screens			5,000			
Water Conservation and Delivery			10,000			
Environmental Restoration and Compliance			2,000			
Western Drought Response			100,000			
Facilities Operation, Maintenance, and Rehabilitation			2,332			
Other Funding subtotal			166,332			
Total W&RR			1,118,972	813,402	452,362	1,265,764

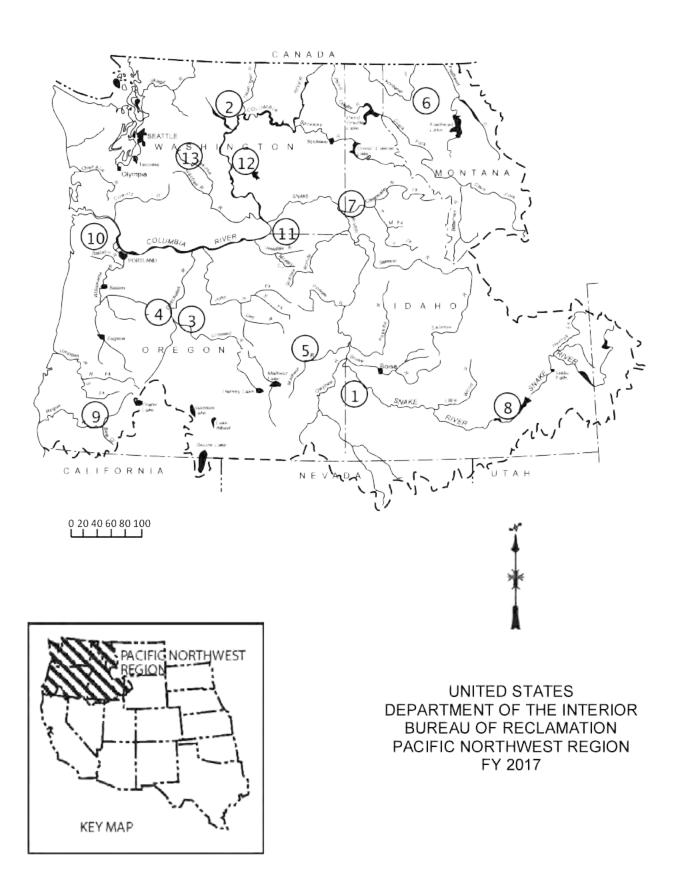
1/ Public Law 114-113, the Consolidated Appropriations Act for 2016 provided Reclamation an additional \$166.3 million in six categories including Western Drought Response (\$100.0 million), rural water (\$47.0 million), and four other categories. At the time of budget preparation, these funds had yet to be distributed by program 2/ The FY 2017 Budget proposes discretionary funds for SJRRP in a separate account, the San Joaquin River Restorations Fund. For FY 2016, funding was provided within Water and Related Resources in the CVP, Friant Divison, for the same purpose.

3/ The FY 2017 Budget proposes funding for the Navajo-Gallup Water Supply Project, Aamodt Indian and Taos Pueblo Indian Water Rights Settlements in a separate account, the Indian Water Rights Settlements account. For FY 2016, funding was provided within Water and Related Resources for the same purposes.

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Columbia and Snake River Salmon Recovery

Project FCRPS ESA Implementation

Endangered Species Recovery Implementation

(Conservation & Consultation)

Environmental Program Administration

Examination of Existing Structures

General Planning Activities

Land Resources Management Program

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Public Access and Safety Program

Recreation and Fish and Wildlife Program Administration

Reclamation Law Administration

Water Conservation Field Services Program

FY 2017 Pacific Northwest Region Budget Summary (\$ in thousands)

		FY 2017							
Project	FY 2016 Enacted	Water & Energy	Land Mgmt.	Fish & Wildlife	Facility Operations	Facility Maint.	FY 2017 Request	Other Fed/ Non-Fed	Total Program
Boise Area Projects	4,909	498	1,902	341	1,885	45	4,671	8,113	12,784
Columbia and Snake River FCRPS ESA Imp.	18,000		·	18,000			18,000	0	18,000
Columbia Basin Project	<i>14,810</i>	<u>784</u>	<i>3,469</i>	<u>20</u>	<i>3,757</i>	<u>6,232</u>	<u>14,262</u>	<i>208,500</i>	222,762
Grand Coulee	9,750		200		3,187	6,180	9,567	206,028	215,595
Ephrata	5,060	784	3,269	20	570	52	4,695	2,472	7,167
Crooked River Project	792	74	137	73	513	3	800	201	1,001
Deschutes Project	583	129	171	67	205		572	40	612
Eastern Oregon Projects	731	140	97	299	210	12	758	135	893
Endangered Species Recv Implementation	300			300			300	0	300
Hungry Horse Project	422				373	135	508	12,131	12,639
Lewiston Orchards Project	642	39	30	3,509	22	5	3,605	25	3,630
Minidoka Area Projects	4,618	450	1,420	761	2,040	129	4,800	14,558	19,358
Rogue River Basin Project, Talent Division	3,071	145	188	1,268	675	561	2,837	2,043	4,880
Tualatin Project	424	16	183	168	219	4	590	300	890
Umatilla Project	2,990	73	255	175	2,307	40	2,850	134	2,984
Washington Area Projects	475	74	295	90	64		523	0	523
Yakima Project	7,571	140	370	594	5,204	36	6,344	5,495	11,839
Yakima River Basin Water Enhancement Project	12,811	15,799					15,799	6,856	22,655
Total - Water and Related Resources	73,149	18,361	8,517	25,665	17,474	7,202	77,219	258,531	335,750

^{1/} Public Law 114-113, the Consolidated Appropriations Act for 2016 provided Reclamation an additional \$166.3 million in six categories including Western Drought Response (\$100.0 million), rural water (\$47.0 million), and four other categories. At the time of budget preparation, these funds had yet to be distributed by program.

PACIFIC NORTHWEST REGION

	FY 2017 REQUEST FOR WATER AND RELATED RESOURCES							
FY 2016	Water &	Land	Fish &	Facility	Facility	Total		
Enacted	Energy	Management	Wildlife	Operations	Maintenance	Program		
\$73,149	\$18,361	\$8,517	\$25,665	\$17,474	\$7,202	\$77,219		

The Bureau of Reclamation Fiscal Year (FY) 2017 Request for the Pacific Northwest Region (Region) for Water and Related Resources totals \$77.2 million. This increase of \$4.2 million over 2016 enacted reflects the high priority and emphasis placed on project operations and maintenance, and rehabilitation and extraordinary maintenance investments while also meeting Endangered Species Act (ESA) requirements affecting Reclamation projects. The request supports key programs and is in line with the Administration's and Department's priorities including ensuring healthy watersheds and sustainable, secure water supplies; powering our future, and responsible use of the nation's resources.

The Region, which includes the entire Columbia River Basin watershed, currently has 35 authorized projects supplying irrigation from 54 reservoirs with a total active capacity of 18 million acre-feet. It serves a population of 11 million in areas rapidly becoming urbanized near major cities. As the municipal, industrial, and irrigation demand for water increases, so does the demand for water to support Tribal and ESA needs. The Region's projects irrigate approximately 2.9 million acres of land with an annual crop yield of approximately \$2.3 billion. Reservoir operations have prevented nearly \$4.1 billion in damages from floods from 1950 to 2015. The Region has 10 power plants including the Grand Coulee power complex, which is among the largest in North America, producing nearly a fourth of the Federal Columbia River Power System's (FCRPS) total generation. The Region's power plants produce an average annual 22.9 billion kilowatt-hours of electricity.

The Region's budget is driven by Reclamation's core mission of managing, developing, and protecting water and related resources in an environmentally and economically sound manner in the interest of the American public. ESA compliance continues to play an increasingly visible, costly, and important role in defining the Region's program. Current Biological Opinions (BiOps) on the FCRPS require significant resources and are anticipated to continue for decades. Active and pending project specific operations and maintenance BiOps require actions to reduce or offset adverse effects to endangered and threatened species through scientifically justified operational changes, facility modifications, and habitat rehabilitation.

The Region is also concerned with the condition of its aging facilities and the resources needed to maintain facilities to maintain system reliability and delivery of benefits. While the Region's power facilities have benefited tremendously from the direct funding of operations and maintenance by the Bonneville Power Administration (BPA), operating and maintaining irrigation facilities will demand an increasing share of budget resources.

The Water and Energy Management and Development request totals \$18.4 million, an increase of \$2.8 million over 2016 enacted. The increase is primarily associated with the Yakima River Basin Water Enhancement Project (YRBWEP), particularly Cle Elum Fish Passage. YRBWEP is a tool that will help water managers more effectively use the limited supply of water in the Yakima River Basin for irrigation and for instream flows for fish. Restoration and enhancement activities continue on the Wapatox Canal to reduce the potential for failure and allow for the continued irrigation water delivery. Implementation of conservation grants with irrigation districts continues on the Sunnyside Valley Irrigation District Phase II diversion reduction project of piping 66 laterals and the Roza Irrigation District diversion reduction

project to construct a reregulating reservoir. Reclamation is continuing to work on cost-effective projects with a strong Federal interest that are included within the Yakima River Basin Integrated Water Resource Management Plan (Integrated Plan). Some of the ongoing projects include evaluating potential sites for ground water storage in the Yakima River Basin and coordinating with the Yakama Nation in the final design for infiltration and storage. Feasibility studies and environmental compliance for the Keechelus-to-Kachess conveyance and the Kachess Drought Relief Pumping Plant are anticipated to be complete in FY 2016 utilizing State of Washington funding. Final design and environmental compliance for the Cle Elum Pool Raise was complete in FY 2015. The majority of the increase is to continue construction of the Cle Elum Dam Fish Passage which began in FY 2015 with the award of an initial contract to build an access road and bridge. Construction of the road and bridge will continue through FY 2016 with construction of the secant piles for the gate structure and helix in FY 2017. Construction of the Cle Elum Dam Fish Passage is being funded jointly by Reclamation and the State of Washington through a memorandum of understanding (MOA).

Other funded activities include: \$797,000 to continue Water Conservation Field Services Program (WCFSP) activities that benefit Reclamation projects or districts receiving Reclamation water throughout the Region. The funding provides for technical assistance and cost-share grants with districts to encourage more efficient use of water supplies and the practice of water conservation to aid in the protection of threatened and endangered species on the project. Additionally, funds totaling \$560,000 are provided within various Regional operating projects for activities to eliminate the unauthorized use of water, participate in stakeholder discussions about various water management issues, and general project management and support for planning activities.

The Land Management and Development request totals \$8.5 million, an increase of \$200,000 over 2016 enacted. Funding is included for general land management activities such as resolving trespass issues, public safety issues, boundary determination, and fencing to prevent degradation of resources that are necessary activities for Reclamation managed lands. Other activities include funding for continued development and use of a Geographic Information System (GIS) and costs associated with the National Spatial Data Infrastructure. The increase is associated with additional requirements for rights of use permits, land acquisitions and disposals.

The **Fish and Wildlife Management and Development** request totals \$25.7 million, an increase of \$2.6 million over 2016 enacted due to additional funding for the Lewiston Orchards Water Exchange project, and includes \$18 million for the Columbia and Snake River Salmon Recovery Federal Columbia River Power System (FCRPS) program. The remaining \$4.3 million largely funds ESA project-specific compliance for the operations and maintenance for 19 projects in the PN Region not covered by the FCRPS BiOps. These funds address both the costs of Section 7(a)(2) consultations and the cost of implementing terms of biological opinions. While these costs do not typically include ESA related litigation, ESA compliance costs generally have a direct and inverse relationship to litigation risk. Consultation costs may include research required to identify the effect of a Reclamation project on threatened and endangered species, preparation of ESA documentation, and costs associated with coordination with the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service during consultation. Implementation costs include studies to optimize project operations, facility modifications, and habitat mitigation needed to reduce or offset adverse effects to listed species and maintain ESA compliance.

The Columbia and Snake River Salmon Recovery FCRPS ESA Implementation program budget of \$18 million will be used to implement multiple BiOp actions. These mitigation actions allow continued operation of the FCRPS, including Grand Coulee and Hungry Horse dams, and continued compliance with the ESA. National Oceanic and Atmospheric Administration (NOAA) Fisheries FCRPS BiOp mitigation actions include: hydro system improvement actions for salmon including flow augmentation in the Columbia River; salmon hatchery improvements; avian predation reduction efforts; and Columbia

River tributary habitat improvement actions for salmon, including water acquisitions to improve instream flows in tributaries. This program supports annual leasing and the potential permanent acquisition of water through state water banks from willing parties improving instream flows for salmon mitigation in the Snake River. The program implements the FWS FCRPS BiOp and continues the consultation on the effects of the FCRPS on bull trout critical habitat. Litigants are actively challenging the legality of the NOAA Fisheries BiOp. Additionally, the current 2010/2014 FCRPS NOAA Fisheries BiOp expires in 2018. The 2017 budget includes funds for reconsultation with NOAA Fisheries and the National Environmental Policy Act efforts required for the new BiOp.

The **Facility Operations** request totals \$17.5 million, equal to the 2016 enacted. This funding will ensure the continued delivery of water for irrigation, municipal, industrial use and flood control, fish and wildlife, and recreation benefits. These activities are commensurate with authorized purposes, legal compliance, and contractual obligations.

The **Facility Maintenance and Rehabilitation** activity request totals \$7.2 million and provides funding to address the region's replacements, additions, and extraordinary maintenance of multi-purpose project facilities. This decrease of \$1.5 million from 2016 enacted is due to a change in the schedule of activities. Some of the major maintenance activities in the FY 2017 request continue FY 2016 efforts and include: \$2,067,000 to replace the Leavenworth Surface Water Intake, \$1,518,000 for Roza Fish Screen modification, \$800,000 for the drum gate coffer dam addition at Grand Coulee, \$500,000 to replace P5 and P6 wheels, stators and cores, \$350,000 to replace Pump Generating Plant (PGP) Exciters, Governor, Relays and Controls and \$284,000 to replace the PG 7-12 pump generating breakers.

Direct Funding of Power Operations and Maintenance - Under a 1996 interagency agreement, the BPA provides for direct funding of power operations at all hydroelectric power facilities in the Region. This agreement allows for day to day power operations and maintenance, and includes long term planning and evaluation of proposed maintenance activities, as well as, various performance measures and targets for Reclamation to meet. The Region will be operating under the fifth 5-year funding agreement, within the interagency agreement for the 2017-2021 period, and expects to continue its successful partnership with BPA.

BPA provides over \$156.1 million annually in O&M funding as well as over \$7 million for small capital improvements and replacements. Through FY 2015, Reclamation has expended over \$1.3 billion to successfully operate and maintain the power system. In addition, under a separate MOA, approximately 122 separate subagreements with BPA have been executed which provide funding for major capital infrastructure improvements at the power facilities. Through FY 2015, Reclamation has expended \$516 million for capital improvement activities. One of the major subagreements BPA will continue funding is the Supervisory Control and Data Acquisition System (SCADA) at Grand Coulee and Hungry Horse, funded at \$73.6 million over 17 years and scheduled to be completed in FY 2020. Other examples include:

- Modernization of the G19-G21 generators in the Third Power Plant (TPP) at Grand Coulee, currently funded at \$10M for the Phase 1 design portion over 4 years;
- Replacement of the G1-G18 Stator Windings, Cores and Spare Replacements in the Left and Right Power House at Grand Coulee, funded at \$123.0 million over 11 years;
- Replacement of the G1-G18 Static Exciters in the Left and Right Power Plant at Grand Coulee, funded at \$50.5 million over 11 years;
- Replacement of the P1-P6 Exciters, Relays & Controls; PG7-PG12 Governors, Exciters, Relays & Controls in the Pumping Plant at Grand Coulee, funded at \$30.0 million over five years;
- Replacement of the turbine runners at Palisades, funded at \$30.2 million over eight years;
- Station Service and MCC Upgrades at Hungry Horse, funded at \$8.1 million over five years;

• Capital improvements to the TPP to support the overhaul including: replacement of the excitation system, replacement of the 236 MVA transformers for units 19 and 20, replacement of the governors, rehabilitation of the cranes, construction of a materials storage building, modification of the fixed-wheel gate chamber, and rehabilitation of the elevators.

Planned Accomplishments in FY 2017:

The Region's infrastructure is maintained through constant monitoring and assessment which facilitates efforts to achieve the best results with limited resources. The Region's water infrastructure facilities will be operated and maintained in a manner to achieve a good rating for 90 of the 105 facilities. The Region's water infrastructure includes 57 high and significant hazard dams and 48 reserved works associated facilities. The FY 2017 Extraordinary Maintenance (XM) program request will fund replacements, additions, and extraordinary maintenance activities that correct known deficiencies, improve safety, and replace equipment that has reached its service life. Grand Coulee is planning to replace P5 and P6 wheels, stators and cores at the PGP, provide much needed maintenance to the drum gate structure, replace exciters, governors, relays and controls at the PGP and make progress on the Leavenworth surface water intake rehabilitation. Yakima Project will also continue modifications of fish screens at Roza Canal.

The Region's high level initiatives for management of water and related resources include providing support for the Columbia River negotiations and supporting elements of the Integrated Plan that are cost effective and have a strong Federal interest. Progress in the Yakima Basin will continue with construction of secant piles needed for the support of the gate structure and helix for Cle Elum fish passage which contributes towards Reclamation's obligation for fish passage in accordance with the Yakama Nation Settlement Agreement.

The Region's power facilities will be operated and maintained in a manner to achieve a good rating for 8 of the 10 power facilities. Under the 1996 interagency agreement with the BPA, the region will perform the day to day power operations and maintenance activities necessary to ensure power delivery. The region is currently in the process of overhauling six generating units at the Grand Coulee TPP. Reclamation completed six pre-overhaul projects and began the overhaul of the first generating unit. The generating units have been in service since mid-1970 and age-related wear is beginning to create problems which have resulted in increased power outages and reduced reliability. The estimated completion date is December 2024.

Planned Accomplishments in FY 2016:

The FY 2016 XM program request will fund replacements, additions, and extraordinary maintenance activities that correct known deficiencies, improve safety, and replace equipment that has reached its service life. Additional work is planned for the Grand Coulee PGP including the stator rewinds, the Leavenworth Surface Water Intake Rehab and the replacement of the impeller, governors, exciters, and unit controls. Yakima Project will also continue modifications at Roza Canal.

The Region's high level initiatives for management of water and related resources include providing support for the Columbia River negotiations; and supporting elements of the Integrated Plan that are cost effective and have a strong Federal interest. In support of the Cle Elum fish passage project, the access road and bridge contract will be fully funded and award is anticipated for the contract to begin construction of the secant piles. Mitigation efforts will continue in the Rogue River Project that support BiOp requirements by continuing to improve fish habitat with strategic placement of large wood material.

Actual Accomplishments in FY 2015:

The Region constantly monitored and assessed infrastructure to achieve the best results with limited resources. The Region's water infrastructure facilities were operated and maintained in a manner to

achieve a good rating for 95 of the 105 facilities. Completed construction on the multi-year Minidoka Spillway replacement project. Additional progress was made for the following XM activities; Arrowrock sluice gate decommissioning, Hungry Horse visitor center overlook rehabilitation, Grand Coulee ring seal refurbishment, PGP 7-11 unit breaker replacement, replacement of governors, exciters, relays and controls, Leavenworth backbone pipeline replacement, Umatilla atlas polar trash rake transporters, and upgrades at the Howard Prairie Reservoir Marina to meet Americans with Disabilities accessibility requirements.

The Region's high level initiatives for management of water and related resources included providing support for the Columbia River negotiations; and supporting elements of the Integrated Plan that are cost effective and have a strong Federal interest. Progress was made toward meeting the BioOp requirements for Rogue River with the strategic placement of large wood material to improve fish habitat and modifications to the Oak Street Fish Ladder. Cle Elum Fish Passage began construction of an access road and bridge which contributes towards Reclamation's obligation for fish passage in accordance with the Yakama Nation Settlement Agreement. Construction of fish passage facilities at Cle Elum is the highest priority for the Yakama Nation as well as State and Federal fishery managers because it has the greatest benefits.

Boise Area Projects

LOCATION: Southwestern Idaho and northeastern Oregon, including Elmore, Ada, Boise, Canyon, Gem and Payette Counties in Idaho and Malheur County in Oregon.

DESCRIPTION/JUSTIFICATION: The Boise Area Projects are separated into the Arrowrock and Payette Divisions, providing irrigation water for about 377,000 acres. The projects consist of four storage dams and reservoirs (Anderson Ranch, Arrowrock, Deadwood, and Cascade), two diversion dams (Boise River and Black Canyon), and three power plants (Black Canyon, Boise River Diversion, and Anderson Ranch). The power plants have a combined generating capacity of 51,500 kilowatts and an average generation of about 195 million kilowatt-hours. Bonneville Power Administration (BPA), through a separate Memorandum of Agreement, directly funds power operation and maintenance costs. In addition, BPA directly funds through subagreements, major power replacements, additions, and improvements. Canals, water distribution systems, and other storage facilities are operated and maintained by the irrigation districts.

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902 (Anderson Ranch, Arrowrock, Boise River Diversion, and Black Canyon); P.L. 61-289, Advances to the Reclamation Fund, June 25, 1910 (Deadwood, and Cascade); P.L. 76-260, Reclamation Project Act of 1939, August 4, 1939; P.L. 85-624, Fish and Wildlife Coordination Act of 1958, August 12, 1958; P.L. 87-589, August 16, 1962 (Mann Creek Project); P.L. 93-205, Endangered Species Act of 1973, December 28, 1973 as amended; P.L. 97-293, Reclamation Reform Act of 1982, as amended; Federal Water Project Recreation Act of 1965, July 9,1965, as amended by Reclamation Recreation Management Act of 1992, Title XXVIII of P.L. 102-575; Authority to accept funding from the Bonneville Power Administration is found under Section 2406 of P.L. 102-486, the Energy Policy Act of 1992, October 24, 1992; P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996; and P.L. 106-493, To Provide Equal Exchange of Land around the Cascade Reservoir, November 9, 2000.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

1 Togram Financiai Data		
	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$400,000	\$498,000
Land Management and Development	1,750,000	1,902,000
Fish and Wildlife Management and Development	730,000	341,000
Facility Operations	1,923,000	1,885,000
Facility Maintenance and Rehabilitation	106,000	45,000
Enacted/Request	\$4,909,000	\$4,671,000
Non-Federal	792,000	798,000
Other Federal - BPA Direct Funding	5,647,000	5,860,000
Other Federal - BPA Subagreements	1,871,000	1,116,000
Other Federal - BPA Small Capital	275,000	339,000
Other Federal - BPA Multipurpose Direct Funding	0	0
Prior Year Funds	0	0
Total Program	\$13,494,000	\$12,784,000
Prior Year Funds/Non-Federal/Other Federal	(8,585,000)	(8,113,000)
Total Reclamation Allotment	\$4,909,000	\$4,671,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Project Water Conservation Assistance - Continues to provide project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts and with city, State, and county governments within Reclamation lands. The program provides measurable water management benefits through technical assistance and cost-share grants with districts to encourage more efficient use of water supplies and the practice of water conservation to aid in the protection of threatened and endangered species on the project. Other - Continues general water and energy management activities within the Boise Area Projects. Continues contact with districts and responses to outside entities on general project management. Continues activities related to the elimination of unauthorized use of water. Continues cooperative efforts among Reclamation, irrigation districts, and the State of Idaho by monitoring water quality and quantity. Continues development of conservation partnership agreements with Boise Project water contractors and other Federal, State and local entities to foster improved water management. Continues management support for planning activities. \$538,000

Non-Federal - Various (40.000)

Subtotal, Water and Energy Management and Development

\$498,000

Land Management and Development - Continues land management activities including: resolving trespass issues and boundary disputes, conducting field reviews of the project land base, repairing and replacing boundary markers, issuing land use authorizations as requested by the public and other governmental agencies, acquiring and disposing of land interest for project purposes, controlling noxious weeds through integrated pest management programs, solving soil and moisture conservation problems, constructing and maintaining fencing to protect project boundaries, cleaning up dump sites that may contain hazardous waste, conducting surveys for cultural resources, and maintaining existing land records. Continues forest fire prevention practices to reduce wildfire hazard and the infestation and spread of western gall rust. Continues Geographic Information System (GIS) data analysis, utilization,

update and dissemination of data for project needs. Reclamation Recreation Management Act, Title XXVIII – Begins the engineering plans and construction to shore up approximately 580 linear feet of Cascade Lake shoreline to prevent further erosion of the recreation site. This activity will be implemented through 50 percent cost-share partnerships.

2,002,000

Non-Federal - Various

(100,000)

Subtotal, Water and Energy Management and Development

1,902,000

Fish and Wildlife Management and Development - Continues planning, design, and implementation activities for the protection of fish and wildlife and their habitats. Includes biological evaluation and monitoring of grazing leases and rotating grazing schedules to prevent erosion. Continues project involvement to respond to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on the project. Continues review of other agency National Environmental Policy Act documents and plans which may affect project operations. Biological Opinion (BiOp)

Implementation - The Upper Snake BiOp was issued in 2005 (for bull trout) and supplemented in 2014 (for bull trout critical habitat); they focus on impacts of project operations to bull trout and bull trout critical habitat in the Boise Project area. Begins analysis of previously obtained monitoring data to better define project impacts on fish and wildlife and their habitat. Continues Section 7 Endangered Species Act (ESA) compliance which involves any necessary new consultations and continued implementation of BiOp requirements in the Boise and Payette watersheds. Continues implementation activities such as water temperature monitoring, stream flow gauging, and coordination and reporting. The funding decrease is due to the completion of many aspects of data collection as specified in the 2005 BiOp.

341,000

Facility Operations - Continues day to day operation of Anderson Ranch Dam and Reservoir, Black Canyon Diversion Dam and Reservoir, Deadwood Dam and Reservoir, Cascade Dam and Lake Cascade, Arrowrock Dam and Reservoir, and Black Canyon Hydropumps. Continues management of recreation facilities at Black Canyon and Mann Creek, as well as the partnership with the State of Idaho for management of recreation facilities at Lake Cascade. Continues law enforcement contracts at Black Canyon, Cascade, and Mann Creek. Continues land management activities on recreation sites within project boundaries such as forest fire prevention practices and GIS data maintenance contracts.

Power Items - Continues day to day operations and maintenance of Anderson Ranch Power Plant, Black Canyon Diversion Power Plant, and Boise River Diversion Power Plant and associated transmission facilities under direct funding agreement with BPA. Maintenance items include replacement of the thrust bearing cooling coils at Anderson Ranch and Black Canyon Diversion Power Plants, maintenance of the Unit One cooling water piping at Black Canyon Diversion Power Plant, maintenance of the Generator One cooling system components at Anderson Ranch Powerplant, and replacement of the Unit One Governor programmable logic controller system for the Boise River Diversion Power Plant, replacement of the flow meters for the penstock at Anderson Ranch Power Plant, replacement of the vibration monitoring system for the generating units at Anderson Ranch Power Plant, and replacement of the powerhouse building roof at Boise River Diversion Power Plant.

8,742,000

Other Federal - BPA Direct Funding (5,860,000)
Other Federal - BPA Small Capital (339,000)
Non-Federal - Various (658,000)

Subtotal, Facility Operations

1,885,000

Facility Maintenance and Rehabilitation - Continues required annual inspections of High and Significant Hazard Dams and technical assistance to operating entities for completion of operations and maintenance recommendations resulting from the Associated and Dam Facility Reviews. Continues assistance with selection of the proper methods and materials to assure compliance with Reclamation standards. Continues dam instrumentation oversight, data tracking, and general investigations that are

common to five reserved works facilities. The funding decrease is due to higher priority activities in the BPA-funded power program.

<u>Power Items</u> – Continues funding for the Black Canyon Power Plant Trash Rake System. The debris which accumulates on the trash rack is currently removed by personnel from a boat tied off to the upstream dam and requires a partial reservoir drawdown; the new trash rake system will eliminate both the risk to personnel safety and the need for drawdowns. If not funded, more frequent reservoir drawdowns and greater safety risks to personnel will continue. Continues funding for the Anderson Ranch Station Service Upgrade. This upgrade will resolve the repeated and frequent failures of the switchgear that have created unscheduled maintenance outages that have affected generation.

1,161,000 (1,116,000)

Other Federal - BPA Subagreement Subtotal, Facility Maintenance and Rehabilitation

45,000

Reclamation Request \$4,671,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Columbia and Snake River Salmon Recovery Federal Columbia River Power System Endangered Species Act (ESA) Implementation

LOCATION: Columbia and Snake River basins in the States of Idaho, Oregon, Montana, and Washington.

DESCRIPTION/JUSTIFICATION: This program implements actions under Section 7(a)(2) of the Endangered Species Act (ESA) as required by the 2008 Biological Opinion (BiOp) and the 2010 & 2014 Supplemental Biological Opinions issued by the National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries). The 2014 Supplemental BiOp is titled "Endangered Species Act Section 7(a) (2), Consultation on Remand for Operation of the Federal Columbia River Power System (FCRPS)." A separate U.S. Fish and Wildlife Service (FWS) 2000 BiOp titled "Effects to Listed Species from Operations of the Federal Columbia River Power System (FCRPS)" is still in effect as well. This program also implements the flow augmentation for ESA listed species in the Columbia River Basin as evaluated in the "Supplemental Comprehensive Analysis of the Federal Columbia River Power System and Mainstem Effects of the Upper Snake and Other Tributary Actions" and required in the "Consultation for the Operation and Maintenance of 10 U.S. Bureau of Reclamation Projects and two Related Actions in the Upper Snake River Basin above Brownlee Reservoir."

The BiOp represents unprecedented collaboration with States and Tribes in the Columbia River Basin to formulate the Reasonable and Prudent Alternative (RPA) and this collaboration is slated to continue until 2018 during the 10-year implementation period for the BiOp. The 2014 Supplemental FCRPS NOAA BiOp is the latest issued in response to litigation associated with previous Biological Opinions. Litigation by outside parties challenging the BiOp continues.

Reclamation is one of three action agencies that consulted on operations of the FCRPS. Reclamation and the U.S. Army Corps of Engineers operate Federal dams on the Columbia and Snake Rivers. Bonneville Power Administration transmits and markets the Federal power produced by these dams. In total, 13 species of anadromous fish (salmon and steelhead) have been listed by NOAA Fisheries and two non-anadromous species (Kootenai River white sturgeon and bull trout) have been listed by FWS in the Columbia River Basin affected by operation of the FCRPS. Also included in the 2008 and 2010/2014 supplemental BiOps are the Southern Resident Killer Whale and Southern Distinct Population Segment of Green Sturgeon, and eulachon. Reclamation actions include modifications to hydro system operations, specific actions to improve tributary habitat and hatcheries for salmon and steelhead, predator reduction, and research and monitoring of action effectiveness.

In 2008, Reclamation entered, along with the other action agencies, into multiple 10-year memoranda of agreements with two states and five tribes to support the 2008 FCRPS BiOp and anadromous fish recovery. This program also funds Reclamation actions included in those agreements.

AUTHORIZATION: Authorities to conduct program activities required by Section 7 of P.L. 93-205, Endangered Species Act, (16 U.S.C. 1536) are the Reclamation Act of June 17, 1902, (43 U.S.C. 391, et seq.), and acts amendatory and supplementary thereto; Section 14 of the Reclamation Project Act of August 1939, (43 U.S.C. 389); the Fish and Wildlife Coordination Act (16 U.S.C. 661, et seq.), as amended; and individual Reclamation project authorizing acts. Reclamation is conducting the Tributary Habitat Program under authorities contained in Sec. 5 of the Endangered Species Act (16 U.S.C. 1534), the Fish and Wildlife Coordination Act (16 U.S.C.661-666c), and Sec. 7(a) of the Fish and Wildlife Act of 1956 (16 U.S.C. 742f(a)) as delegated from the Secretary of the Interior to the Bureau of Reclamation in Secretarial Order No. 3274, dated September 11, 2007, as amended in Amendment No. 2, dated

January 27, 2010; and Departmental Manual 255 DM 1, dated October 5, 2010, (to carry out off-site habitat improvements in the Pacific Northwest Region when required to comply with Sec. 7(a)(2) of the ESA).

COMPLETION DATA: This is an ongoing program to meet legal requirements of the BiOps.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Fish and Wildlife Management and Development	\$18,000,000	\$18,000,000
Enacted/Request	\$18,000,000	\$18,000,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$18,000,000	\$18,000,000
Prior year funds/Non-Federal/Other Federal	0	0
Total Reclamation Allotment	\$18,000,000	\$18,000,000

Total Cost Information*

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation	N/A	\$271,373,370	\$18,000,000	\$18,000,000	N/A
Non-Federal	N/A	N/A	N/A	N/A	N/A
Total	N/A	\$271,373,370	\$18,000,000	\$18,000,000	N/A

^{*}Included costs associated with the program, there is no appropriation ceiling

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Fish and Wildlife <u>1</u> /	\$18,000,000	\$18,000,000
Total	\$18,000,000	\$18,000,000

^{1/} This is an ongoing program that will continue as long as measures are needed.

METHODOLOGY: The cost allocation is to Fish and Wildlife Management and Development, following Reclamation's Programmatic Budget Structure.

APPROPRIATION CEILING: None

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development - Coordination and Administration - Continues administrative and technical support activities related to consultation and litigation for three separate biological opinions: (1) portions of Reclamation's Upper Snake Irrigation Projects BiOp, (2) Reclamation's portion of the FCRPS FWS BiOp (bull trout and other species) and (3) Reclamation's portion of the FCRPS NOAA Fisheries BiOp (salmon and other species). Continues interagency participation with the Federal Caucus, 13 tribal governments, four states, the Northwest Power and Conservation Council, and others involved in FCRPS actions to improve the survival of ESA-listed species. Continues coordination and participation on various teams including Regional Implementation Oversight Group, Technical Management Team, System Configuration Team, Federal Habitat Team, Federal Subbasin Team, Federal Hatchery Team, Research, Monitoring, and Evaluation Team, and others. Supports action agency development and preparation of implementation plans, annual progress reports. and comprehensive evaluations related to the BiOps. Supports agency activities associated with Fish Accord Memorandum of Agreements. Supports agency activities associated with the Adaptive Management Implementation Plan for the 2010/2014 FCRPS NOAA Fisheries BiOp. Beginning in 2016, Columbia/Snake Salmon Recovery Office will initiate consultation with NOAA Fisheries in order to have a new BiOp in place prior to the end of the 2010-2018 BiOp period. The NEPA efforts for the new BiOp will also begin in 2016 in order to have a new BiOp in place prior to the end of the 2010-2018 BiOp period; these two efforts should be fully underway by 2017. \$2,742,000

<u>Hydro Actions</u> - <u>Management/Implementation</u> - Continues Reclamation's participation in the implementation of real-time operational measures, system flood control, and Columbia Basin Project actions associated with ESA listed species as required by the 2014 FCRPS BiOp,. <u>Water Acquisition</u> - Continues the acquisition of up to 487,000 acre-feet of water from willing sellers for Snake River flow augmentation (a requirement of the Upper Snake BiOp) and to meet Reclamation obligations under the Nez Perce Water Rights Settlement. 5,184,000

Habitat - Continues technical assistance for actions to enhance tributary spawning and rearing habitats required by the RPA to offset effects of FCRPS hydro system operations on salmon and steelhead survival. Continues Reclamation's involvement with non-Federal parties located in Idaho, Oregon, and Washington to modify or remove instream diversion-related barriers to improve fish passage. Continues environmental compliance, cultural resource compliance, and design of barrier removal, fish screen, and channel complexity projects (blockages, culvert, and flood plain). Continues to support Reclamation's participation with tribes and other locally-based partners to improve habitat for salmon and steelhead in Columbia River tributaries. Continues Reclamation's habitat program with participation in approximately 50 site-specific habitat improvement projects per year. Continues consultation with NOAA Fisheries in order to have a new BiOp in place prior to the end of the 2010-2018 BiOp period.

9,116,000

Research, Monitoring and Evaluation (RM&E) - Continues a long-term effectiveness and compliance monitoring program to verify that agency actions for listed species are having the desired biological effects. The results from these activities allow Reclamation to redirect efforts if the desired result fails to materialize. The RM&E program is being implemented through a joint Federal, State, and Tribal partnership to increase the accuracy, collection efficiency, and the transferability of the data across government programs. These programs are also multi-agency efforts in cooperation with local stakeholders and landowners to ensure the design and construction of tributary habitat improvement projects are effective.

Hatcheries - Reclamation expects to fund actions that modify FCRPS hatcheries if determined these

activities can reduce adverse impacts to listed species. Continues input and coordination on implementation of the updated Hatchery Genetic Management Plans for the Leavenworth (WA) Fish Hatchery Complex. These actions are expected to reduce the detrimental impacts of artificial production on wild stocks of salmon and steelhead.

236,000

Reclamation Request \$18,000,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2015

Status of NEPA Compliance

Columbia Basin Project

LOCATION: Central Washington, including Adams, Douglas, Franklin, Grant, Lincoln, Okanogan, and Walla Walla Counties.

DESCRIPTION/JUSTIFICATION: This is a multipurpose project consisting of three storage dams and reservoirs, three Grand Coulee power plants and one pump generating plant with a combined generating capacity of 6,494,000 kilowatts and an annual generation of approximately 21 billion kilowatthours, and associated switchyards, transmission lines, feeder canal, and canal systems. In addition, there are 27 generators and six pumping units on the project. Water distribution systems and other storage facilities are operated by water users. The irrigation works extend from the North Dam on Banks Lake southward to the vicinity of Pasco, Washington. Principle irrigation facilities include Banks Lake, Dry Falls Dam, the Main Canal, Bill Clapp Lake, Pinto Dam, the East Low Canal, the West Canal, Royal Branch Canal, Moses Lake Outlet Structure, Potholes Reservoir, O'Sullivan Dam, and the Potholes Canal system which includes the Wahluke and Eltopia Branch canals. Approximately 671,000 acres of land are irrigated by the project and 2,360 miles of canal and 3,434 miles of drains are maintained. Additionally, Pinto Dam, the Moses Lake Outlet Structure, O'Sullivan Dam, the Soap Lake Protective Works, and the Esquatzel Coulee Diversion Channel have flood control functions. Using American Recovery and Reinvestment Act (ARRA) funding a second barrel was added to the existing siphons. The barrel is a cast-in-place concrete tube approximately 15 feet in diameter and 10,000 feet long for both siphons. This work allows increased delivery of water to lands located south of the complex along the East Low Canal providing irrigation capacity as authorized in the project legislation. Bonneville Power Administration (BPA), through a separate Memorandum of Agreement, directly funds power operation and maintenance costs. In addition, BPA directly funds, through Subagreements, major power replacements, additions, and improvements at Grand Coulee Dam and power plants.

AUTHORIZATION: P.L. 74-409, Parker and Grand Coulee Dams, August 30, 1935; Reclamation Act of 1939, Act of August 4, 1939, Ch. 418, 53 Stat. 1187; P.L. 78-8, Columbia Basin Project Act of March 10, 1943; P.L. 89-448, Third Power Plant, Grand Coulee Dam, June 14, 1966; P.L. 93-205, Endangered Species Act of 1973, December 28, 1973, as amended; P.L. 89-72, Federal Water Project Recreation Act of 1965, July 9, 1965, as amended by Reclamation Recreation Management Act, Title XXVIII of P.L. 102-575, October 30, 1992; Authority to accept funding from the Bonneville Power Administration is found under section 2406 of P.L. 102-486, the Energy Policy Act of 1992, October 24, 1992; and P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$874,000	\$784,000
Land Management and Development	3,300,000	3,469,000
Fish and Wildlife Management and Development	26,000	20,000
Facility Operations	3,921,000	3,757,000
Facility Maintenance and Rehabilitation	6,689,000	6,232,000
Request	\$14,810,000	\$14,262,000
Non-Federal	15,718,000	12,829,000
Other Federal – BPA Direct Funding	123,487,000	127,154,000
Other Federal – BPA Subagreement	38,177,000	64,517,000
Other Federal – BPA Small Capital	4,000,000	4,000,000
Prior Year Funds	0	0
Total Program	\$196,192,000	\$222,762,000
Prior Year Funds/Non-Federal/Other Federal	(181,382,000)	(208,500,000)
Total Reclamation Allotment	\$14,810,000	\$14,262,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Project Water Conservation Assistance - Continues to provide project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts and with city, State, and county governments within Reclamation land. The program provides measurable water management benefits through technical assistance and cost-share grants with districts to encourage more efficient use of water supplies and the practice of water conservation to aid in the protection of threatened and endangered species on the Columbia Basin Project. Other - Continues negotiation for an Interagency Agreement with Fish and Wildlife Service to encompass fish collection, laboratory analysis, and report findings. Continues activities related to water rights and work with contracting issues relative to water service and repayment contracts, existing and new ground water management programs (including municipal and industrial water permitting), and issues related to Reclamation interaction with irrigation districts of the Columbia Basin Project. Continues activities related to the elimination of unauthorized use of water. Continues management support for planning activities.

\$814,000 Non-Federal – Various (30,000) Subtotal, Water and Energy Management and Development

\$784,000

Land Management and Development - Continues land management activities including environmental compliance, resolving trespass issues, resolving encroachment disputes, conducting field reviews of the project land base of over 300,000 acres and over 6,000 miles of right-of-ways, resolving encroachment disputes, repairing and replacing boundary markers, issuing land use authorizations as requested by the public and other governmental agencies, acquiring and disposing of land interest for project purposes, controlling noxious weeds through integrated pest management programs, resolving soil and moisture conservation problems, administering a grazing program, cleaning up dump sites that may contain hazardous waste, conducting surveys for cultural resources and hazardous materials relating to all

appropriate inquiries, and maintaining existing land records. Continues land surveys of project lands to ensure no encroachment on public lands around Lake Roosevelt. Under Memoranda of Understanding with three counties, Adams, Grant, and Franklin, payment in lieu of taxes will be made. Continues Geographic Information System activities. Continues administration of the settlement land program. Reclamation Recreation Management Act, Title XXVIII – Continues work on North Dam Park improvements. The existing park requires maintenance assistance in order to meet accessibility requirements. This work will be implemented through a 50 percent cost-share partnership with Coulee Area Parks and Recreation District.

3,519,000
Non-Federal - Coulee Area Parks and Recreation District (50,000)

Non-Federal - Coulee Area Parks and Recreation District Subtotal, Land Management and Development

3,469,000

Fish and Wildlife Management and Development - Continues project involvement to respond to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on the project. Continues review and preparation of environmental compliance documents and checklists for proposed minor actions by cooperators. Continues interagency coordination on work conducted by others that may affect project operations or facilities. Continues review of other agencies' National Environmental Policy Act (NEPA) documents and plans which may affect project operations. Continues assistance to non-Reclamation entities for resource monitoring and inventory efforts.

Facility Operations – Continues day to day operations of two storage dams and reservoirs, one pump and generating plant, and one feeder canal at Grand Coulee. Continues cultural properties management mitigation activities at Lake Roosevelt and funding for Leavenworth Fishery Complex operations for mitigation purposes. Continues funding for the Lake Roosevelt Comprehensive Environmental Cleanup Responsibility Liability Act activities which will allow participation to ensure Reclamation's environmental responsibilities for the exposed lands around Lake Roosevelt are met. Continues facility and associated facility review programs, emergency action plans and standing operating procedures of the project reserved and special reserved works. Continues flood control functions and associated operations and maintenance of project facilities including stream gaging on natural waterways in the Columbia Basin including related portions of facility, information technology and Supervisory Control and Data Acquisition system security. Continues day to day operation and maintenance of recreational facilities at Scooteney and Summer Falls Parks including the day use area, camping, swimming, and boat ramp facilities.

Power Items – Begins and completes the addition of an aerial lift for the visitor arrival center. Currently the facility does not have an aerial man lift to perform maintenance on visitor center equipment. Continues day to day operations and maintenance of the Left, Right, and Third Power Plants and associated transmission facilities under direct funding agreement with BPA. Continues the modernization and uprate of units G19 thru G21. The condition of the units has deteriorated to the point that complete overhaul is necessary to ensure these machines will continue to operate reliably. Continues installation of the station service compressed air system. The Grand Coulee station service compressed air system is an unusually long system without separate zones. If part of the system fails the whole system is compromised limiting the supply of compressed air to the powerhouses and industrial areas. Continues routine operation and maintenance of downstream stabilization drainage shafts to ensure proper operation of stabilization monitoring system. Continues foundation drain cleaning in the main and Third Power Plant dams. Continues maintenance items including Third Power Plant cavitation repairs, foundation drain cleaning, fixed wheel gate refurbishment, and overhaul of units G22-G24. Continues repainting of G1-18 penstocks and replacement of bypass valves and piping. Continues replacement of small tools and equipment directly related to the power generation of the facility. Continues replacement of left and right power plant cooling water strainers. Replacement of the strainers will reduce the potential of a forced outage due to cooling water strainer and valve failure. Continues review and certification of critical

hydro connections. A nominal number of fasteners need to be removed, inspected, reinstalled and torqued during major maintenance of the units. Continues Right power plant stop log refurbishment. Existing stop logs need to be refurbished in order for the facility to perform maintenance on the units. Continues replacement of the Left and Right power plant governor oil pump replacement. The existing oil pumps are obsolete and repair parts are nonexistent. Completes fire alarm system upgrades for the Left and Right power plants, Industrial Area buildings, and the Pump Generating Plant. Completes RPH gantry crane repainting. Completes 1195 switchyard power transformer relocation. Completes relay upgrades in the left power plant. Completes unit G10 bus replacement. Completes digital fault recorders. The digital fault recorders assist in assessing units when there is a maintenance incident.

Non-Federal – Water Users (12,749,000)
Other Federal – BPA Direct Funding (127,154,000)
Other Federal – BPA Small Capital (4,000,000)
Subtotal, Facility Operations

3,757,000

Facility Maintenance and Rehabilitation – Begins industrial area crane control updates. Existing crane controls and motor drives need to be upgraded or replaced in order to bring reliability to the cranes and maintenance in the facility. Continues drum gate floating bulkhead addition. Current drum gate maintenance is limited by the spring drawdown season. This inability to do annual maintenance could lead to drum gate failure or the inability to operate the gates at a time when they are needed for reservoir spill operations. Continues replacement of phase reversal switches in the pump generating plant. Existing phase reversal switches are located in the pump generating plant and have reached their useful life. Placement of the switches in the switchyard provides better use of space in the pump generating plant. Continues the replacement of warehouse three. The existing roof has structural load issues and leaks. The existing building was a WWII building reinstalled for the storage of critical parts and equipment. If not replaced it could fail thus exposing critical parts and equipment to the elements. Continues addition of a new fire station building in support of fire response for any Reclamation facilities at Grand Coulee Dam. The fire department's previous building was dilapidated and subsequently demolished. The fire department was relocated into the pump generating plant for storage of equipment, living quarters, and offices. The existing space in the pump generating plant is needed for upcoming maintenance and replacement projects. Continues rehabilitation of pump generating plant coaster reverse flow gates. If the gates are not rehabilitated, the unit could fail causing the gates to fail to close, creating an unsafe work environment. Continues replacement of 6.9KV Dam Feeders and substation. Existing equipment is the originally installed equipment and has exceeded its useful service life. Failure of the Dam Feeders and substation would mean a loss of power for operation of coaster, drum, and ring seal gate. Continues work towards the replacement of Leavenworth surface water intake and delivery system. The existing surface water intake and water delivery system is becoming unreliable and does not comply with current National Marine Fisheries Service fish screen criteria. The system is required to bring water from Icicle Creek to be used for the production of salmon at the Leavenworth hatchery as part of required mitigation due to the construction and operation of Grand Coulee Dam. Continues rehabilitation of the ring seal gates in the dam. These gates need refurbishment in order to prevent the leakage of water around the existing gates. The gates provide reliability for movement of water when required to maintain flood control elevations on Lake Roosevelt. Continues replacement of PG 7-12 unit breakers. Existing breakers are worn and require significant maintenance annually. Replacement will reduce maintenance costs and increase reliability of the pump generating units. Continues replacement of pump unit P5 and P6 pumps, stators, and cores. The existing stators and cores were installed in 1950 and require replacement as they have exceeded their useful life. If not replaced, water deliveries for irrigators could be compromised. Continues replacement of pump generating plant governors, exciters, protective relays, and unit controls. The existing equipment is at the end of its useful life. Maintenance requirements have increased significantly and spare parts are no longer available for the equipment. The replacement will

provide the needed reliability creating a cost savings from reduced maintenance efforts. Continues mitigation for cultural resource sites on Lake Roosevelt. These actions are required due to Section 106 of the National Historic Preservation Act. Continues with ongoing drainage inventory study. Continues replacement of 24 inch values and actuator on the main dam drum gates. Replacement will bring reliability to drum gate operations. Continues funding for High and Significant Hazard Dams reviews and examinations (Annual Site Inspections, Periodic Facility Reviews, etc.). Completes upgrades to fire alarm systems in the pump generating plant, the industrial area buildings and left power plant. Existing alarm systems require new operating software and programing due to the existing software becoming obsolete. Fire alarm system will become inoperative or malfunction, thus potentially endangering project staff during an incident. Completes drum gate recoating. The existing drum gates require recoating both on the inside and outside. Recoating will extend the existing life of the drum gates, the chamber, and prevent failure of the drum gates due to rusting.

Power Items – Continues replacement of transformers on units G11-18. Existing transformers need replacement as they are beyond their useful life. If not replaced a generation of the unit will be lost. Continues replacement of G1-18 unit windings, static exciters and governors. The existing equipment is beyond its useful life and requires replacement. If this equipment is not replaced, the ability to produce power will be jeopardized and employee safety may be compromised. Continues upgrades to the incline elevator. The existing elevator requires upgrades to existing controls and operation mechanisms due to changes in the elevator codes. Continues replacement of P1-6 cooling water strainers. Replacement of the existing strainers will reduce the maintenance and will decrease the outage time when the cooling water strainers need to be cleaned. Continues G1-18 by-pass value and piping replacements. Completes replacement of pump generating unit 7 and 8 shaft seal replacement. Continues extraordinary maintenance on the isolated phase bus that runs between the units G 1-3 to the Pump Generating Plant. This provides power to operate pump units P 1-6. Failure of this bus would cause the loss of the ability to pump water from Lake Roosevelt to Banks Lake for irrigation operations, thus potentially causing an interruption of water for irrigation purposes. Completes replacement of wicket gates on units G22-23. Existing wicket gates will be replaced during the third power plant unit overhaul maintenance activities. 70,749,000

Other Federal - BPA Subagreement Subtotal, Facility Maintenance and Rehabilitation

6,232,000

(64,517,000)

Reclamation Request

\$14,262,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Crooked River Project

LOCATION: Central Oregon near Prineville, Oregon, within Crook County.

DESCRIPTION/JUSTIFICATION: This project includes the following multipurpose facilities: Ochoco Dam and Reservoir, Arthur R. Bowman Dam (A.R. Bowman), and Prineville Reservoir. The A.R. Bowman Dam is a reserved works and operated under contract by the Ochoco Irrigation District. Reclamation provides maintenance of the hydromet system for flood control forecasting, oversight of recreation management for areas at Prineville Reservoir by Oregon Parks and Recreation Department, pest management, resolving boundary issues, environmental audits, water conservation measures, and activities related to unauthorized use of water. This project provides irrigation water to approximately 23,000 acres. The Crooked River is located below A.R. Bowman Dam and is designated as a wild and scenic river that was classified as a recreational river area by Congress (P.L. 90-542, 82 Stat. 907, October 1998). The Crooked River is a tributary of the Deschutes River.

AUTHORIZATION: P.L. 74-46, Soil Conservation and Domestic Allotment Act, April 27, 1935; P.L. 80-841, Interior Department Appropriations Act, June 29, 1948; P.L. 335, Rehabilitation and Betterment Act, October 7, 1949; P.L. 84-992, Crooked River Project, August 6, 1956; P.L. 85-624, Fish and Wildlife Coordination Act, August 12, 1957; P.L. 88-598, Crooked River Project Extension, September 18, 1964; P.L. 90-480, Architectural Barriers Act of 1968, August 12, 1968, 82 Stat. 718 (42 U.S.C. 4151 et seq.); P.L. 90-583, Noxious Plant Control, Carson-Foley Act (43 U.S.C. 1241 et seq.) Chapter 28, Sec. 1241, October 17, 1968; P.L. 91-512, Resource Recovery Act, October 26, 1970; P.L. 93-205, Endangered Species Act of 1973, Section 7(a)(1), December 28, 1973, as amended; P.L. 93-251, Water Resource Development Act, March 7, 1974; Archeological and Historic Preservation Act of 1974, May 24, 1974; P.L. 97-293, Reclamation Reform Act of 1982, as amended; P.L. 89-72, Federal Water Project Recreation Act of 1965, July 9, 1965, as amended by Reclamation Recreation Management Act, Title XXVIII of P.L. 102-575, October 30, 1992; Executive Order 13007, Indian Sacred Sites, May 24, 1996; P.L. 107-69, Law Enforcement Services, 41 U.S.C. 253(c)(1) as implemented by FAR 6.302-1(a)(2), November 12, 2001.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$55,000	\$74,000
Land Management and Development	158,000	137,000
Fish and Wildlife Management and Development	73,000	73,000
Facility Operations	491,000	513,000
Facility Maintenance and Rehabilitation	15,000	3,000
Enacted/Request	\$792,000	\$800,000
Non-Federal	176,000	201,000
Prior Year Funds	0	0
Total Program	\$968,000	\$1,001,000
Prior Year Funds/Non-Federal/Other Federal	(176,000)	(201,000)
Total Reclamation Allotment	\$792,000	\$800,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Project Water Conservation Assistance - Continues to provide project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts and with city, county, and State governments. Water conservation field services provides measurable water management benefits through technical assistance and cost share grants with districts to encourage efficient use of water supplies and water conservation that aids in the protection of threatened and endangered species on the Crooked River Project. Other - Continues activities related to the elimination of unauthorized use of water. Increase is associated with a water conservation field services grant for demonstration and implementation of effective water management measures.

\$99,000

Non-Federal – Irrigation District (25,000)

Subtotal, Facility Operations

Land Management and Development - Continues general land management activities within the various project boundaries including environmental compliance activities, resolving trespass issues, resolving boundary disputes, repairing and replacing boundary markers, and coordinating land resource management activities with irrigation districts, U.S. Forest Service, Bureau of Land Management, and Oregon Parks and Recreation Department. Continues issuing land use permits as requested by the public and other governmental agencies. Continues conducting land surveys and meeting cultural resource management needs and commitments. All of the facilities are federally owned and under Reclamation's jurisdiction.

Fish and Wildlife Management and Development - Continues to respond to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on the project and reviews other agencies' National Environmental Policy Act documents and plans which may affect project operations. Biological Opinion (BiOp) Implementation - Continues reconsultation with the National Oceanic Atmospheric Administration Fisheries (NOAA Fisheries) on project operations. Continues coordination with habitat conservation planning activities and implementation requirements of the 2005 NOAA Fisheries BiOp on project operations under Section 10(j) of the Endangered Species Act.

73,000

\$74,000

Facility Operations - Continues coordination of operations at A.R. Bowman Dam in conjunction with Ochoco Irrigation District to include flood control functions and associated operation and maintenance. This includes stream gauging, hydromet system operations and maintenance costs, and cyclical revision to emergency action plans. Continues day to day land and recreation management activities at Prineville Reservoir under a 50 percent cost-share agreement with Oregon Parks and Recreation Department. Continues implementation of integrated pest management plan for control of aquatic weeds, noxious weeds, and other pest species. Continues to support operational changes and instream flow hydrological studies.

Non-Federal - Oregon Parks and Recreation Department Subtotal, Facility Operations (<u>176,000)</u> **513,000**

Facility Maintenance and Rehabilitation - Continues funding for reviews and examinations. Decrease due to the four year rotation schedule of inspections.

3,000

Reclamation Request \$800,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Deschutes Project

LOCATION: Central Oregon north and south of Bend, Oregon, in Crook, Deschutes, and Jefferson Counties.

DESCRIPTION/JUSTIFICATION: This project includes Wickiup Dam and Reservoir, Haystack Dam and Reservoir, Crane Prairie Dam and Reservoir, and North Unit Main Canal. Reclamation provides continued flood control forecasting, water conservation, activities related to resolving unauthorized use of water, pest management, environmental audits, and recreation management of areas on Reclamation lands within the Deschutes Project including Wickiup, Crane Prairie, and Haystack Reservoirs which serves central Oregon including the cities of Bend, Redmond, Madras, and Prineville. All remaining project facilities are operated and maintained by water users.

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902; P.L. 68-292, Second Deficiencies Appropriations Act, December 5, 1924; P.L. 83-573, Amended Contract and Haystack Dam, Deschutes Project, August 10, 1954; P.L. 85-624, Fish and Wildlife Coordination Act of 1958, August 12, 1958; P.L. 90-480, Architectural Barriers Act of 1968, August 12, 1968, 82 Stat. 718 (42 U.S.C. 4151 et seq.); P.L. 90-583, Noxious Plant Control, Carson-Foley Act (43 U.S.C. 1241 et seq.) Chapter 28, Sec. 1241, October 17, 1968; P.L. 93-205, Endangered Species Act of 1973, December 29, 1973, as amended; P.L. 97-293, Title II, Reclamation Reform Act, October 12, 1982, as amended; P.L. 96-480, Steven-Wydler Technology Innovation Act of 1980, as amended by P.L. 99-502, Federal Technology Transfer Act, October 20, 1986; P.L. 101-233, The North American Wetlands Conservation Act, December 13, 1989; P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996; P.L. 107-69, Law Enforcement Services, 41 U.S.C. 253(c)(1) as implemented by FAR 6.302-1(a)(2), November 12, 2001.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$140,000	\$129,000
Land Management and Development	160,000	171,000
Fish and Wildlife Management and Development	72,000	67,000
Facility Operations	211,000	205,000
Enacted/Request	\$583,000	\$572,000
Non-Federal	32,000	40,000
Prior Year Funds	0	0
Total Program	\$615,000	\$612,000
Prior Year Funds/Non-Federal/Other Federal	(32,000)	(40,000)
Total Reclamation Allotment	\$583,000	\$572,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Project Water Conservation Assistance - Continues to provide project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts and with city, county, and State governments. The program provides measurable water management benefits through technical assistance and cost-share grants with districts to encourage more efficient use of water supplies and water conservation to aid in the protection of threatened and endangered species on the Deschutes Project.

Other - Continues activities related to the elimination of unauthorized use of water. Continues program management support for planning activities.

\$169,000

Non-Federal - Various (40,000)

Subtotal, Water and Energy Management and Development

\$129,000

Land Management and Development - Continues general land management activities within the various project boundaries including environmental compliance activities, resolving trespass issues and boundary disputes, repairing and replacing boundary markers, and coordinating land resource management activities with the irrigation districts, U.S. Forest Service (USFS), the state of Oregon, and the Bureau of Land Management on federally owned project facilities at Haystack, Wickiup, and Crane Prairie Dams and the North Unit Irrigation District. Continues issuing land use permits as requested by the public and other governmental agencies (consent-to-use, rights-of-way), conducting land surveys, and meeting cultural resource management needs and commitments.

Fish and Wildlife Management and Development - Continues responding to requests from natural resource agencies for project operational data relevant to fish and wildlife issues and reviewing other agencies' National Environmental Policy Act documents and plans which may affect project operations.

Biological Opinion (BiOp) Implementation - Continues coordination with habitat conservation planning activities and coordinating and reporting implementation requirements of the 2005 NOAA Fisheries BiOp on project operations.

67,000

Facility Operations - Continues coordination and monitoring of the flood control operations at Haystack, Wickiup, and Crane Prairie Reservoirs to include real time monitoring of the hydromet system for flood control forecasting. Continues coordination of joint USFS and Reclamation recreation management activities at Haystack Reservoir, with the USFS providing recreation management and operation and

maintenance for the lands under Reclamation jurisdiction through an interagency agreement. Continues implementation of integrated pest management plan for control of aquatic weeds, noxious weeds, and other pest species. Continues with security patrols on lands at Reclamation project facilities for Haystack, Wickiup, and Crane Prairie Reservoirs.

205,000

Reclamation Request \$572,000

Eastern Oregon Projects

LOCATION: The four projects that make up the "Eastern Oregon Projects" are spread throughout several counties in eastern Oregon and Western Idaho. Baker Project is located in Baker and Union Counties, Oregon. Burnt River Project is located in Baker County, Oregon. The Owyhee Project lies west of the Snake River in Malheur County, Oregon, and Owyhee County, Idaho. The Vale Project is in Harney and Malheur County lands and located along the Malheur River and Willow Creek in east-central Oregon, surrounding the town of Vale.

DESCRIPTION/JUSTIFICATION: Reclamation has oversight and management responsibilities of the transferred projects of Baker, Burnt River, Owyhee, and Vale. Funding for the Eastern Oregon Projects allows for activities in the areas of land resource, environmental and recreation management, flood control, and water conservation.

The Baker Project consists of two divisions: the Lower and the Upper. The Lower Division provides supplemental water supply for about 7,300 acres along the Powder River, while the Upper Division provides supplemental water for about 18,500 acres. The key feature of the Baker Project Lower Division is Thief Valley Dam; the key feature of the Upper Division is Mason Dam. The Burnt River Project consists of a storage dam and reservoir that provide water for supplemental irrigation for about 15,000 acres. The key feature of the Burnt River Project is Unity Dam. The Owyhee Project furnishes irrigation water for 105,249 acres of land lying along the west side of the Snake River in eastern Oregon and southwestern Idaho. The key feature of the Owyhee Project is Owyhee Dam. The Vale Project furnishes irrigation water to 34,993 acres of land. The key features of Vale Project are Agency Valley, Bully Creek, and Warm Springs Dams. Other features in the Eastern Oregon Projects include canals, laterals, pumping plants, and drains.

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902, (Owyhee); Vale Project was authorized by the President on October 21, 1926, pursuant to P.L. 289, Advances to Reclamation funds, June 25, 1910; P.L. 292, Second Deficiency Appropriations Act for 1924, December 5, 1924; P.L. 84-993 Emergency Relief Act, April 8, 1935, (Burnt River Project); P.L. 87-706, Upper Division, September 27, 1962, (Baker Project); P.L. 89-72, Federal Water Project Recreation Act of 1965, July 9, 1965, as amended by Title XXVIII of P.L. 102-575, Reclamation Recreation Management Act, October 30, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Program Financial Data

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Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$150,000	\$140,000
Land Management and Development	110,000	97,000
Fish and Wildlife Management and Development	251,000	299,000
Facility Operations	210,000	210,000
Facility Maintenance and Rehabilitation	10,000	12,000
Enacted/Request	\$731,000	\$758,000
Non-Federal	160,000	135,000
Prior Year Funds	0	0
Total Program	\$891,000	\$893,000
Underfinancing	0	0
Prior Year Funds/Non-Federal/Other Federal	(160,000)	(135,000)
Total Reclamation Allotment	\$731,000	\$758,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Project Water Conservation Assistance - Continues to provide project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts and with city, county, and State governments within Reclamation lands. The program provides measurable water management benefits through technical assistance and cost-share grants with districts to encourage more efficient use of water supplies and the practice of water conservation to aid in the protection of threatened and endangered species on the Eastern Oregon Projects. Other - Continues program management support for water resource planning activities. Continues general water management activities within project boundaries. Continues activities related to the elimination of unauthorized use of water. \$165,000

Non-Federal – Various (25,000)

Subtotal, Water and Energy Management and Development

\$140,000

Land Management and Development - Continues land management activities including resolving trespass issues and boundary disputes, conducting field reviews of project-wide land base, repairing and replacing boundary markers, issuing land use authorizations as requested by the public and other governmental agencies, acquiring and disposing of land interest for project purposes, controlling noxious weeds through integrated pest management programs, solving soil and moisture conservation problems, administering a grazing program, cleaning up dump sites that may contain hazardous waste, conducting surveys for cultural resources, and maintaining existing land records. These activities include managing land use at Lake Owyhee, coordinating land resource management activities with the Bureau of Land Management and Oregon State Parks, administering cabin site permits and meeting several cultural resource management needs and commitments at Lake Owyhee.

Fish and Wildlife Management and Development - Continues review of other agencies' National Environmental Policy Act documents and plans which may affect project operations. Continues responding to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on the project. Continues planning, designing, and implementing activities for the

protection of fish and wildlife and their habitats. Biological Opinion (BiOp) Implementation - The Upper Snake BiOp was issued in 2005 (for bull trout) and supplemented in 2014 (for bull trout critical habitat); they focus on impacts of project operations to bull trout and bull trout critical habitat in the Eastern Oregon Project area. Continues Agency Valley cost-share grant activity to establish a conservation pool in Beulah Reservoir. Continues implementation including management, coordination, monitoring, and trap and transport efforts that include trapping bull trout entrained at Agency Valley Dam and transporting them back to Beulah Reservoir. 399,000 (100,000)

Non-Federal - Vale Oregon Irrigation District

Subtotal, Fish and Wildlife Management and Development

299,000

Facility Operations - Continues operation and maintenance of hydromet stations, rainfall and streamflow gages, and early warning systems for flood control forecasting at various sites and projects throughout Eastern Oregon. Continues to fund stream gaging services provided by the U.S. Geological Survey and the State of Oregon as well as law enforcement services at Lake Owyhee recreation areas.

220,000

(10,000)

Subtotal, Facility Operations

Non-Federal – Various

210,000

Facility Maintenance and Rehabilitation - Continues technical assistance to the operating entities for completion of operations and maintenance recommendations resulting from the Associated and Dam Facility Reviews and assistance with selection of the proper methods and materials to assure compliance with Reclamation standards. Continues dam instrumentation oversight, data tracking, and general investigations. 12,000

Reclamation Request \$758,000

Endangered Species Recovery Implementation

LOCATION: Region-wide, in the states of Idaho, Oregon, Washington, and portions of Montana and Wyoming.

DESCRIPTION/JUSTIFICATION: This program supports Endangered Species Act (ESA) activities on certain Reclamation projects where no site-specific funding source exists, additional support where funding is insufficient, or funding for unforeseen consultations. The activities under this program reflect Reclamation's proactive efforts to minimize the potential effects of Reclamation's actions upon listed, proposed listings, and candidate species pursuant to Section 7 (a)(1) of the ESA. This program also provides for necessary consultations that may arise due to new species listings and/or unanticipated work that may affect listed species. Reclamation is a principal operator of Federal water projects in the Pacific Northwest.

AUTHORIZATION: P.L. 93-205, Endangered Species Act of 1973, Section 7 (a) (1), December 28, 1973, as amended.

COMPLETION DATA: Not Applicable. This is an ongoing program which will continue as long as conservation and consultation efforts are needed.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Fish and Wildlife Management and Development	\$300,000	\$300,000
Enacted/Request	\$300,000	\$300,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$300,000	\$300,000
Prior Year Funds/Non-Federal/Other Federal	0	0
Total Reclamation Allotment	\$300,000	\$300,000

Total Cost Information

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance To Complete
Reclamation	N/A	\$16,291,304	\$300,000	\$300,000	N/A
Non-Federal 1/	N/A	235,000	0	0	N/A
Total	N/A	\$16,526,304	\$300,000	\$300,000	N/A

^{1/} Non-Federal cost sharing.

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development – Continues support of consultation activities and the implementation of biological opinion requirements on certain projects throughout the Pacific Northwest. Continues coordination with the National Oceanic and Atmospheric Administration Fisheries and the U.S. Fish and Wildlife Service on development of biological opinions, new species listings, delistings, critical habitat designations, reintroductions, and recovery plans. Continues ESA-related activities such as responding to Freedom of Information Act inquiries, creating administrative records, producing records during "discovery," preparing for and filing depositions, and assisting the Solicitor's Office and Department of Justice in legal activities.

Reclamation Request

\$300,000

Hungry Horse Project

LOCATION: Northwestern Montana within Flathead County.

DESCRIPTION/JUSTIFICATION: The project consists of Hungry Horse Dam and Reservoir, a power plant with a generating capacity of 428,000 kilowatts and an annual generation of 948.6 million kilowatt-hours, and associated switchyard and transmission lines. The dam creates a large reservoir by storing water in times of heavy runoff to minimize downstream flooding. This stored water is released for power generation when the natural flow of the river is low. Bonneville Power Administration (BPA), through a separate Memorandum of Agreement, directly funds power operation and maintenance costs. In addition, BPA directly funds through Subagreements, major power replacements, additions, and improvements.

AUTHORIZATION: P.L. 78-329, Hungry Horse Dam, June 5, 1944; and authority to accept funding from the Bonneville Power Administration is found under Section 2406 of P.L. 102-486, the Energy Policy Act of 1992, October 24, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Facility Operations	\$360,000	\$373,000
Facility Maintenance and Rehabilitation	62,000	135,000
Request	\$422,000	\$508,000
Non-Federal	0	0
Other Federal – Direct Funding	9,263,000	7,889,000
Other Federal – BPA Subagreements	1,913,000	2,177,000
Other Federal – BPA Small Capital	213,000	2,065,000
Prior Year Funds	0	0
Total Program	\$11,811,000	\$12,639,000
Prior Year Funds/Non-Federal/Other Federal	(11,389,000)	(12,131,000)
Total Reclamation Allotment	\$422,000	\$508,000

WORK PROPOSED FOR FY 2017:

Facility Operations - Continues the day to day operations of Hungry Horse Dam and Reservoir, including management activities of cultural resource properties.

Power Items – Begins design of power plant right abutment parking lot netting and visitor center rock netting. Existing netting is not sufficient to keep rock from falling onto the lower power plant parking lot. If the netting fails rocks may fall and injure employees or the public and may cause extended damage to employee and government equipment in the area below the right abutment. Begins control room panel revision. The existing control room panel requires updating to replace obsolete controls and displays. This will allow for more effective remote and on-station operation of the facility. Begins design on a replacement sewer lift station. The existing lift station is beyond its useful life and if not replaced could fail and cause sewage to backup into the power plant. Begins study of turbine and winding replacement of units G1-4. The study will examine if existing turbines could be re-designed to provide better efficiency. Begins design of the addition of digital fault recorders in the operations control room. A digital fault recorder allows for the diagnosis of equipment failures related to control room operations and hydro generation. The equipment will allow for accurate analysis of events during equipment failures. Provides funding for required comprehensive facility reviews. These reviews are required to assist in ensuring appropriate maintenance activities are done in accordance with current procedures. Completes replacement of the Visitor Center exhibits and virtual tour. The exhibits and virtual tour features the construction, history, purpose and benefits of Hungry Horse Dam. Completes glass replacement on the generator high bay. Numerous broken glass windows located in the high bay area of the power plant generator bay need replaced to prevent entry of dust, insects, and birds; and to retain heat in the structure during cold weather. Completes the addition of a technical data center. Technical reference material will be collected/consolidated, organized and cataloged into a searchable database for use by site personnel. Completes replacement of the dam parapet wall lighting. New lighting will be energy efficient, meet historic preservation requirements, and provide proper illumination of the roadway and walking surfaces on top of the dam. Completes the repainting of the water tower located above the visitor center. The water tower stores water for station service water supply, fire suppression, cooling station service, brake

air compressor, and non-potable domestic use. Completes replacement of the visitor center HVAC. Existing equipment, installed in approximately 1972, is subject to frequent failure, heating and cooling components are not energy efficient and temperature control and filtration features are out of date and in need of upgrade. Completes rehabilitation of the visitor center overlook. Continues day to day operations and maintenance of the Hungry Horse Power Plant and associated transmission facilities under direct funding agreement with BPA. Maintenance items include replacement of small tools and equipment directly related to the power generation facility. \$10,327,000

\$373,000

135,000

Other Federal - BPA Small Capital

Other Federal - BPA Small Capital

(7,889,000)

(2,065,000)

Subtotal, Facility Operations

Facility Maintenance and Rehabilitation - Continues cultural resources properties mitigation activities in compliance with Federal law governing the treatment of impacted historic properties. Continues replacement of aged and unserviceable Supervisory Control and Data Acquisition system (SCADA) improving the reliability and control of dam operations. Completes Compressor Blower De-Icing Spillway Ring Gate. Increase due to the addition of multiple Replacement, Additions, and Extraordinary Maintenance activities including compressor blower de-icing spillway ring gate and continuing of the Hungry Horse SCADA system.

<u>Power Items</u> - Completes station service and motor control center upgrades. Failure of the station service distribution system would result in the inability of the facility to provide for water control or generation, particularly when the facility is unmanned and being remotely monitored and controlled by Grand Coulee.

2,312,000

Other Federal - BPA Subagreement (2,177,000)

Subtotal, Facility Maintenance and Rehabilitation (2,177,000)

Reclamation Request \$508,000

Lewiston Orchards Project

LOCATION: The Lewiston Orchards Project is located near the confluence of the Clearwater and Snake Rivers in Nez Perce County, Idaho. The lands served by the project lie entirely within the city of Lewiston, Idaho. A majority of the water for the Lewiston Orchards Project comes from the Craig Mountain watershed located on Nez Perce Reservation lands.

DESCRIPTION/JUSTIFICATION: The project was originally constructed by private entities and became a Federal Project in 1946. Subsequently, the Bureau of Reclamation reconstructed or rehabilitated most of the project features. The operation and maintenance has since been transferred to the Lewiston Orchards Irrigation District, which is the operating entity of the Lewiston Orchards Project. The project facilities include the Webb Creek Diversion Dam, Sweetwater Diversion Dam, West Fork Sweetwater Diversion Dam, feeder canals, three small storage reservoirs (Soldiers Meadows, Reservoir "A" and Lake Waha), a domestic water treatment plant (no longer in use), a domestic water system, and an irrigation water distribution system. Irrigation water supply is delivered to project lands totaling about 3,827 acres, and a dependable domestic water system is provided for approximately 18,000 customers.

Water availability is insufficient to meet 100% of system demands and contractual obligations, resulting in use restrictions for district patrons. Many features and facilities associated with the Lewiston Orchards Project would also benefit from substantial repair, maintenance and in many cases, total replacement. In addition, Lewiston Orchards Project facilities and operations are in conflict with Tribal cultural and natural resource interests. Finally, Lewiston Orchards Project surface diversions seasonally reduce water availability and connectivity within the Lapwai Creek watershed, resulting in adverse effects to ESA-listed steelhead utilizing the watershed.

AUTHORIZATION: The Lewiston Orchards Project was found to be feasible by the Acting Secretary of the Interior on May 31, 1946, pursuant to the Reclamation Project Act of 1939. However, before the Secretary's report was submitted to Congress, the act of July 31, 1946 (60 Stat. 717) specifically authorized construction of the project. P.L. 85-624, Fish and Wildlife Coordination Act of 1958; Federal Water Project Recreation Act of 1965, July 9,1965, as amended by Reclamation Recreation Management Act of 1992, Title XXVIII of P.L. 102-575; P.L. 93-205, Endangered Species Act of 1973, December 28, 1973 as amended; P.L. 97-293, Reclamation Reform Act of 1982, as amended.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Program Financial Data

Frogram Financial Data		
	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$50,000	\$39,000
Land Management and Development	30,000	30,000
Fish and Wildlife Management and Development	537,000	3,509,000
Facility Operations	20,000	22,000
Facility Maintenance and Rehabilitation	5,000	5,000
Request	\$642,000	\$3,605,000
Non-Federal	10,000	25,000
Prior Year Funds	0	0
Total Program	\$652,000	\$3,630,000
Prior Year Funds/Non-Federal/Other Federal	(10,000)	(25,000)
Total Reclamation Allotment	\$642,000	\$3,605,000

Explanation of Significant Changes in Funding: Funding for the Lewiston Orchards Water Exchange activity increased by \$2,963,000. Funding will directly support the current Term Sheet Agreement that stays litigation between Reclamation and the Tribe, confirming Reclamation's commitment to permanent resolution of the Tribal trust, ESA, and water quantity issues surrounding the Lewiston Orchard Project. Funding will be used to continue design and implementation activities for proposed construction of a well and associated facilities. This will replace the surface water system resolving Endangered Species Act (ESA) and Federal and Tribal trust issues while still providing a reliable water supply for the Lewiston Orchards Irrigation District.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Project Water Conservation Assistance - Continues to provide project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts and with city, county, and State governments within Reclamation lands. The program provides measurable water management benefits through technical assistance with districts to encourage more efficient use of water supplies and the practice of water conservation through completion of the meter installation project to aid in the protection of threatened and endangered species on the Lewiston Orchards Project. Other - Continues program management support for planning activities including stakeholder meeting attendance and maintenance of stakeholder relationships. Continues general water management activities within project boundaries. Continues activities related to the elimination of unauthorized use of water. \$39,000

Land Management and Development - Continues general land management activities. These activities include coordinating land resource management activities with the irrigation district, Idaho Fish and Game (recreational fisheries), Nez Perce County administering permits (cabin sites, consent-to-use, rights-of-way) and leases (grazing, mineral, gravel pits), constructing and maintaining fencing, conducting land and cadastral surveys, and meeting cultural resource management needs and commitments.

30,000

Fish and Wildlife Management and Development - Continues project involvement to respond to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on

the project. Continues review of other agencies' National Environmental Policy Act (NEPA) documents and plans which may affect project operations. Biological Opinion (BiOp) Implementation – Continues implementation actions as required by the 2010 BiOp issued by the National Oceanic and Atmospheric Administration Fisheries. These activities continue implementation of BiOp requirements for the protection of Environmental Species Act (ESA) listed steelhead which includes monitoring and reporting on incidental take as well as temperature monitoring, stream flow gauging, management and coordination, and fisheries monitoring that contribute to a better understanding of project impacts on fish and wildlife. Continues construction of an off-reservation groundwater-pumped system consisting of multiple wells; each well could be done in phases, and would be connected to the Lewiston Orchards Project system in lieu of surface water for instream flow to meet requirements of the ESA. Testing of the pilot well indicates that it will meet its production target and that the regional aquifer will support more wells. This supports the long term plan of drilling multiple wells through 2025 at an estimated cost of \$31,000,000. Reclamation and the Nez Perce Tribe have a written agreement for compliance to include the water exchange and eventually title transfer. The funding increase is due to water exchange facility construction and NEPA documentation. Funding will continue NEPA-compliance activities for the title transfer and the full water exchange. Reclamation anticipates receiving \$450,000 of in-kind services in support of the Lewiston Orchards water exchange project in FY 2017.

3,509,000

Facility Operations - Continues funding for the review, investigation and reporting of public safety and security issues, hydromet system operation and maintenance costs, and safety and boundary fence maintenance at recreation sites.

47,000

Non-Federal - Various Subtotal, Facility Operations (25,000) **22,000**

Facility Maintenance and Rehabilitation - Continues technical assistance to the operating entities for completion of operations and maintenance recommendations resulting from the Associated and Dam Facility Reviews and assistance with selection of the proper methods and materials to assure compliance with Reclamation standards. Continues dam instrumentation oversight, data tracking, and general investigations.

5,000

Reclamation Request \$3,605,000

Minidoka Area Projects

LOCATION: Southeastern Idaho, Eastern Idaho, and a small portion of Wyoming.

DESCRIPTION/JUSTIFICATION: Features of this project consist of eight multipurpose dams, which provide irrigation to about 1.2 million acres of land, reservoirs (including Minidoka, American Falls, Jackson Lake, Island Park, Grassy Lake, Palisades, Ririe, and Little Wood), two wildlife mitigation areas, recreation areas on four reservoirs, and three power plants with a combined generating capacity of 195,900 kilowatts and annual generation of about 902 million kilowatt-hours and their associated switchyard and transmission lines. Other storage water delivery systems are operated by the water users. Bonneville Power Administration (BPA), through a separate Memorandum of Agreement, directly funds power operations and maintenance costs. In addition, BPA directly funds, through subagreements, major power replacements, additions, and improvements.

AUTHORIZATION: P.L. 57-161, Reclamation Act of 1902, June 17, 1902, (Minidoka, American Falls, Jackson Lake, Island Park and Grassy Lake); P.L. 69-541, Interior Department Appropriation Act for 1928, January 12, 1927; P.L. 76-260, Reclamation Project Act of 1939, August 4, 1939; P.L. 81-864, Reclamation Act of September 30, 1950 (Palisades); P.L. 84-993, Little Wood River Project Act, August 6, 1956, (Little Wood); P.L. 85-624, Fish and Wildlife Coordination Act of 1958, August 12,1958; P.L. 87-874, Flood Control Act of 1962, October 23, 1962, (Ririe); P.L. 88-583, Lower Teton Division, Teton Basin, September 7, 1964; P.L. 92-500, Federal Water Pollution Control Act, October 18, 1972; P.L. 93-905, Endangered Species Act of 1973, December 28, 1973; P.L. 93-523, Safe Drinking Water Act, as amended, December 1, 1974; P.L. 89-72, Federal Water Project Recreation Act of 1965, July 9, 1965, as amended by Reclamation Recreation Management Act, Title XXVIII of P.L. 102-575, October 30, 1992; Authority to accept funding from the Bonneville Power Administration is found under Section 2406 of P.L. 102-486, the Energy Policy Act of 1992, October 24, 1992; P.L. 97-293, Title II, Reclamation Reform Act, October 12,1982, as amended; P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$470,000	\$450,000
Land Management and Development	1,340,000	1,420,000
Fish and Wildlife Management and Development	625,000	761,000
Facility Operations	2,111,000	2,040,000
Facility Maintenance and Rehabilitation	72,000	129,000
Request	\$4,618,000	\$4,800,000
Non-Federal	1,863,000	1,792,000
Other Federal - BPA Direct Funding	12,549,000	10,683,000
Other Federal - BPA Subagreements	5,750,000	1,720,000
Other Federal - BPA Small Capital	310,000	363,000
Prior Year Funds	0	0
Total Program	\$25,090,000	\$19,358,000
Prior Year Funds/Non Federal	(20,472,000)	(14,558,000)
Total Reclamation Allotment	\$4,618,000	\$4,800,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Project Water Conservation Assistance - Continues to provide project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts. The program provides measurable water management benefits through technical assistance with districts to encourage more efficient use of water supplies and the practice of water conservation to aid in the protection of threatened and endangered species on the Minidoka Area Projects. Other - Continues to provide resources to monitor unauthorized use of water. Continues cooperative efforts between Reclamation, irrigation districts, and the State of Idaho by monitoring water quality and quantity. Continues development of conservation partnership agreements with Minidoka Project water contractors and others to foster improved water management. Continues program management support for planning activities.

\$450,000

Land Management and Development - Continues land management activities associated with project lands such as fire rehabilitation and updating resource management plans. Continues to meet customer service requests on a daily basis including issuing crossing agreements, right-of-way agreements, leases, and other administrative land issues in a timely manner. Continues work to efficiently resolve land use conflicts, trespass issues, and disposal of lands not needed for project purposes. Continues updating the withdrawal review reports and submitting necessary hazardous material surveys for lands to be relinquished. Continues cleaning up dump sites that may contain hazardous waste. Continues constructing and maintaining fencing to protect project boundaries. Continues improvements to the efficiency of data management on project lands through the use of Geographic Information Systems. Continues to ensure compliance with the Endangered Species Act (ESA) and the National Environmental Policy Act (NEPA) in addressing all land management issues. Continues compliance with Native American Treaty Rights such as protection of the American Falls Archeological District. Continues to coordinate invasive weed species management efforts with cooperative weed management entities throughout the Minidoka Project.

1,420,000

Fish and Wildlife Management and Development - Continues review of other agencies' NEPA documents and plans which may affect project operations. Continues responding to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on the project. Continues planning, designing, and implementing activities for the protection of fish and wildlife and their habitats. Activities include biological evaluation and monitoring of grazing leases and rotating grazing schedules to prevent erosion. Continues fish and wildlife mitigation requirements related to Ririe and Teton Dams. Biological Opinion (BiOp) Implementation - Continues compliance with the National Marine Fisheries Service's 2008 Biological Opinion by coordinating, reporting, and implementing flow augmentation requirements. Continues monitoring and reporting activities for ESA listed Snake River Physa in coordination with the USFWS.

Facility Operations - Continues routine day to day operations at project facilities at Jackson Lake Dam, American Falls Dam, Ririe Dam, Minidoka Dam, Palisades Dam and their associated reservoirs. Continues operation of recreation areas at five reservoirs. Continues funding for erosion control work at American Falls Reservoir. Continues to support monitoring of South Fork Snake River flow releases for the maximum use and benefits of water within operational flexibility.

<u>Power Items</u> - Continues funding the day to day operations of Minidoka, Palisades, and Inman Power Plants under the direct funding agreement with BPA. Continues the Inman turbine rehabilitation project which will rebuild the turbine hubs and replace the wicket gates. 14,781,000

Other Federal - BPA Small Capital (363,000)
Non-Federal - Various (1,695,000)

Non-Federal - Various (1,695,000)
Subtotal, Facility Operations

2,040,000

Facility Maintenance and Rehabilitation – Continues design for the replacement of power poles at Palisades Dam. Current power poles are beginning to deteriorate and failure to replace increases both operational and safety risks. Continues funding for High-and Significant-Hazard dam reviews and examinations (Annual Site Inspections, Periodic Facility Reviews, etc.). Continues dam instrumentation oversight, data tracking and general investigations that are common to all five reserved works. Increase due to design, specifications and NEPA required for power pole replacement at Palisades Dam.

<u>Power Items</u> – Continues funding power pole replacement at Palisades Dam. Failure to replace increases operational and safety risks. Continues funding Governor System Replacement for Units 8 and 9 at Inman Power plant.

1,946,000

Other Federal - BPA Subagreements (1,720,000)
Non-Federal - Various (97,000)

Subtotal, Facility Maintenance and Rehabilitation 129,000

Reclamation Request \$4,800,000

Rogue River Basin Project, Talent Division

LOCATION: Southwestern Oregon, near Ashland, within Jackson County.

DESCRIPTION/JUSTIFICATION: This project consists of seven dams and reservoirs, more than 450 miles of associated canals and laterals, and 16 diversion dams that are operated and maintained by the Medford, Rogue River Valley, and Talent Irrigation Districts. An extensive collection, diversion, storage, and conveyance system was constructed to carry excess waters from the Rogue River and Klamath River basins to irrigated lands in the Medford area. Extensive rehabilitation of existing project features was also included in the project authorizations. Under contract with the United States, Talent Irrigation District (TID) operates and maintains joint-use storage and canal facilities. The joint-use features include Hyatt Dam, Emigrant Dam, Keene Creek Dam, Howard Prairie Dam collection and delivery canal systems, and eight smaller diversion dams.

Bonneville Power Administration (BPA), through a separate Memorandum of Agreement, directly funds power operations and maintenance costs. In addition, BPA directly funds, through subagreements, major power replacements, additions, and improvements. Reclamation, with funding from BPA, operates Green Springs Power Plant, another main feature of the project which has a generating capacity of 16,000 kilowatts and generates about 70 million kilowatt-hours annually. Reclamation also provides maintenance of the project-wide hydromet system for flood control forecasting, Tyler Creek wasteway, and water conservation measures.

Other project activities consist of Reclamation's efforts to provide continued flood control forecasting, water conservation, activities related to resolving unauthorized use of water, pest management, environmental audits, law enforcement, right-of-way issues related to urbanization and property development, and recreation management of the areas on Reclamation lands at Emigrant, Hyatt, Howard Prairie, Keene Creek, and Agate Reservoirs. The reservoirs serve the area of southwest Oregon, including the cities of Medford and Ashland. The dams and project distribution facilities are operated by the water users.

AUTHORIZATION: P.L. 74-46, Soil Conservation and Domestic Allotment Act, April 27, 1935; P.L. 81-335, Rehabilitation and Betterment Act, October 7, 1949; P.L. 83-606, Talent Division and Rehabilitation Works, Rogue River Basin Project, August 20, 1954; P.L. 85-624, Fish and Wildlife Coordination Act of 1958, August 12, 1958; P.L. 87-727, Additional Features, Talent Division, Rogue River Basin Project, October 1, 1962; P.L. 90-480, Architectural Barriers Act of 1968, August 12, 1968, 82 Stat. 718 (42 U.S.C. 4151 et seq.); P.L. 90-583, Noxious Plant Control, Carson-Foley Act (43 U.S.C. 1241 et seq.) Chapter 28, Sec. 1241, October 17, 1968; P.L. 93-205, Endangered Species Act of 1973, December 29, 1973, as amended; P.L. 93-251, Water Resource Development Act, March 7, 1974; Archeological and Historic Preservation Act of 1974, May 24, 1974; P.L. 97-293, Title II, Reclamation Reform Act, October 12, 1982, as amended; P.L. 89-72, Federal Water Project Recreation Act of 1965, July 9, 1965, as amended by Reclamation Recreation Management Act, Title XXVIII of P.L. 102-575, October 30, 1992; Authority to accept funding from the Bonneville Power Administration is found under Section 2406 of P.L. 102-486, the Energy Policy Act of 1992, October 24, 1992; P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996; Order 13007, Indian Sacred Sites, May 24, 1996; P.L. 107-69, Law Enforcement Services, 41 U.S.C. 253(c)(1) as implemented by FAR 6.302-1.(a)(2), November 12, 2001.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$183,000	\$145,000
Land Management and Development	400,000	188,000
Fish and Wildlife Management and Development	2,062,000	1,268,000
Facility Operations	426,000	675,000
Facility Maintenance and Rehabilitation	0	561,000
Request	\$3,071,000	\$2,837,000
Non-Federal	275,000	530,000
Other Federal – BPA Direct Funding	1,138,000	1,328,000
Other Federal – BPA Subagreements	1,429,000	50,000
Other Federal – BPA Small Capital	550,000	135,000
Prior Year Funds	0	0
Total Program	\$6,463,000	\$4,880,000
Prior Year Funds/Non-Federal/Other Federal	(3,392,000)	(2,043,000)
Total Reclamation Allotment	\$3,071,000	\$2,837,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Project Water Conservation Assistance -Continues to provide project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts, and with city, county, and State governments within Reclamation lands. The program provides measurable water management benefits through technical assistance and cost-share grants with districts to encourage more efficient use of water supplies and the practice of water conservation to aid in the protection of threatened and endangered species on the Rogue River Project. Other - Continues activities related to the elimination of unauthorized use of water. Continues program management support for planning activities. Decrease is due to completion of pipeline, canal lining, water measurement and telemetry grant provided in 2016.

\$195,000 (50,000)

Non-Federal - Various

Subtotal, Water and Energy Management and Development

\$145,000

Land Management and Development - Continues general land management activities within the various project boundaries including environmental compliance activities, resolving trespass issues, resolving boundary disputes, repairing and replacing boundary markers, and coordinating land resource management activities with the irrigation districts, U.S. Forest Service, Bureau of Land Management, and Jackson County. Continues issuing land use permits as requested by the public and other government

agencies, conducting land surveys, and meeting cultural resource management needs and commitments. Decrease due to completion of marina docks and upgrades at Howard Prairie Reservoir Resort Marina.

188,000

Fish and Wildlife Management and Development - Continues to respond to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on the project. Continues review of other agencies' National Environmental Policy Act documents and plans which may affect project operations. Biological Opinion (BiOp) Implementation - Continues implementation actions for the Rogue River Project BiOp. These actions include placement of large wood material instream to create fish habitat. Continues restoring the Rogue River Riparian Zone. Compliance with the Rogue River BiOp requires restoring vegetation along Bear and Emigrant Creeks, totaling 18 acres (equal to three-stream miles times 50 feet in width). Continues to protect and restore habitat for Endangered Species Act listed plants and the vernal pool fairy shrimp. Continues coordination and implementation for the U.S. Fish and Wildlife and National Marine Fisheries Service (NMFS) implementation BiOps. Decrease associated with progress toward BiOp implementation requirements. 1,268,000

Facility Operations - Continues day to day operations at Hyatt Dam, Emigrant Dam, Keene Creek Dam, Howard Prairie Dam, collection and delivery canal systems, and eight-smaller diversion dams. These are joint-use facilities cost shared with Talent Irrigation District. Work includes stream gauging, hydromet system operations and maintenance costs. Continues day to day land and recreation management activities at Howard Prairie, Hyatt, Keene Creek, Agate, and Emigrant Reservoirs under contract with Jackson County. Continues implementation of integrated pest management plan for control of aquatic weeds, noxious weeds, and other pest species. Continues law enforcement and road maintenance on Reclamation lands and roads. Continues to support instream flow of fisheries and hydrological monitoring. Increase due to additional funding for a 50 percent cost share grant with Jackson County Parks & Recreation Department to perform day to day recreation operations and maintenance management at Emigrant, Agate, and Howard Prairie Reservoirs.

Power Items - Continues funding of the day-to-day operations and maintenance of the Green Springs

Power Plant under the direct funding agreement with BPA.	2,618,000
Other Federal - BPA Direct Funding	(1,328,000)
Other Federal - BPA Small Capital	(135,000)
Non-Federal - Jackson County Parks & Recreation	(285,000)
Non-Federal - Various Irrigation Districts	(195,000)

Subtotal, Facility Operations 675,000

Facility Maintenance and Rehabilitation – Begins work to modify the outlet works regulating gate at Emigrant Dam to safely pass the required range of water flow outlined in the Rogue River Biological Opinion. The required range of flow is known to cause cavitation damage to the outlet works. Increase due to the expected modification of the outlet works regulating gate on Emigrant Dam.

Other Federal - BPA Subagreements (50,000)

Subtotal, Facility Maintenance and Rehabilitation <u>561,000</u>

Reclamation Request \$2,837,000

Tualatin Project

LOCATION: Northwest Oregon near Portland in Clackamas, Yamhill, and Washington Counties.

DESCRIPTION/JUSTIFICATION: The project provides irrigation water to approximately 17,000 acres of land. Principle features of the project include Scoggins Dam, Henry Hagg Lake (reserved works), Patton Valley Pumping Plant, Springhill Pumping Plant, and 88 miles of buried piped lateral distribution systems (transferred works). Construction of Scoggins Dam and the formation of Henry Hagg Lake provide flood control, fish and wildlife, recreation, and water storage to supplement the natural streamflow of the Tualatin River and to meet the increasing water requirements of the area. Under contract with the United States, Tualatin Valley Irrigation District operates and maintains the joint-use facility. Reclamation provides for maintenance of the hydromet system for flood control forecasting, fish mitigation, water quality monitoring, and oversight of recreation management on Henry Hagg Lake by Washington County, pest management, environmental audits, water conservation measures, and activities related to resolving unauthorized use of water.

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902; P.L. 46, Soil Conservation and Domestic Allotment Act, April 27, 1935; P.L. 85-624 Fish and Wildlife Coordination Act, August 12, 1957; P.L. 98-72, the Federal Water Project Recreation Act of 1965, July 9, 1965, as amended by Reclamation Recreation Management Act, Title XXVIII of P.L. 102-575; P.L. 89-596, Tualatin Project, September 20, 1966; P.L. 90-480, Architectural Barriers Act of 1968, August 12, 1968, 82 Stat. 718 (42 U.S.C. 4151 et seq.); P.L. 90-583, Noxious Plant Control, Carson-Foley Act (43 U.S.C. 1241 et seq.) Chapter 28, Sec. 1241, October 17, 1968; P.L. 93-205, Endangered Species Act of 1973, Section 7(a)(1), December 28, 1973, as amended; Archeological and Historic Preservation Act of 1974, May 24, 1974; P.L. 98-293, Reclamation Reform Act of 1982, as amended; P.L. 96-480, Steven-Wydler Technology Innovation Act of 1980, as amended by P.L. 99-502, Federal Technology Transfer Act, October 20, 1986; Executive Order 13007, Indian Sacred Sites, May 24, 1996.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Program Financial Data

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Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$20,000	\$16,000
Land Management and Development	66,000	183,000
Fish and Wildlife Management and Development	86,000	168,000
Facility Operations	211,000	219,000
Facility Maintenance and Rehabilitation	41,000	4,000
Request	\$424,000	\$590,000
Non-Federal	200,000	300,000
Prior Year Funds	0	0
Total Program	\$624,000	\$890,000
Prior Year Funds/Non Federal/Other Federal	(200,000)	(300,000)
Total Reclamation Allotment	\$424,000	\$590,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Project Water Conservation Assistance - Continues to provide project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts and with city, county, and State governments within Reclamation lands. The program provides measurable water management benefits through technical assistance and with districts to encourage more efficient use of water supplies and the practice of water conservation to aid in the protection of threatened and endangered species within the Tualatin Project. Other - Continues activities related to the elimination of unauthorized use of water.

\$16,000

Land Management and Development - Continues general land management activities within the various project boundaries including environmental compliance activities, resolving trespass issues, resolving boundary disputes, repairing and replacing boundary markers, and coordinating land resource management activities with the irrigation district, U.S. Forest Service, Bureau of Land Management, and Washington County. Continues issuing land use permits as requested by the public and other government agencies (consent-to-use, rights-of-way), conducting land surveys, and meeting cultural resource management needs and commitments. Reclamation Recreation Management Act, Title XXVIII - Begins grant work with Washington County Parks and Recreation Department to improve restroom facilities at Henry Hagg Lake to meet ADA compliance requirements. This activity will be implemented through 50 percent cost share partnership. Increase due to funding Title XXVIII grant for ADA improvements at Henry Hagg Lake.

283,000

Non-Federal - Washington County Parks & Recreation Department

183,000

(100,000)

Fish and Wildlife Management and Development - Continues to respond to requests from natural resource agencies for project operational data relevant to fish and wildlife issues. Continues review of other agencies' National Environmental Policy Act documents and plans which may affect project operations. <u>Biological Opinion (BiOp) Implementation</u> - Continues field and documentation work recommended for compliance with Endangered Species Act (ESA) Section 7 requirements for threatened and endangered species on Federal lands to ensure that any action authorized, funded, or carried out by Reclamation at Hagg Lake does not jeopardize the continued existence of either the Kincaid's lupine or

Fender's blue butterfly. Continues coordination and reporting with the U.S. Fish and Wildlife and National Marine Fisheries Service (NMFS) for implementation requirements of the pending BiOp. Increase due to implementation of the 2014 BiOp which requires mechanical removal of an invasive species of Scot's broom, a noxious weed that threatens Kinkaid's lupine. The Kinkaid lupine is a native plant that is the only food source for the full life cycle of the endangered Fender's Blue Butterfly.

168,000

Facility Operations - Continues day to day operation at Scoggins Dam to include flood control functions and associated operation and maintenance. This includes stream gauging, hydromet system operation and maintenance costs, cyclical revision to emergency action plans, and the review, evaluation, and revision of standing operating procedures. Continues day to day land and recreation management activities at Henry Hagg Reservoir. Continues implementation of integrated pest management plan for control of aquatic weeds, noxious weeds, and other pest species. Continues the fish mitigation agreement with Tualatin River Watershed Council and road maintenance on Reclamation lands and roads. Continues work with Washington County to manage elk mitigation on Reclamation lands around Scoggins Reservoir, planting visual screening vegetation and providing winter forage.

419,000

Non-Federal - Tualatin Valley Irrigation District

(200,000)

Subtotal, Facility Operations

Facility Maintenance and Rehabilitation - Continues required annual completion of High and Significant Hazard Dams reviews and examinations (Annual Site Inspections, Periodic Facility Reviews, etc.). Decrease due to specific Periodic Facility Reviews for high-hazard dams completed during Fiscal Year 2016. These reviews are conducted on a four-year rotating schedule.

4,000

Reclamation Request \$590,000

Umatilla Project

LOCATION: Umatilla River basin in northeastern Oregon within Morrow and Umatilla Counties.

DESCRIPTION/JUSTIFICATION: This project consists of McKay Dam and Reservoir, Cold Springs Dam and Reservoir, Feed Canal Diversion Dam and Canal, Maxwell Diversion Dam and Canal, and Three Mile Falls Diversion Dam and Canal. McKay Dam is regulated for irrigation, flood control, and fish flow releases. Water exchange facilities include the West Extension Irrigation District (WEID) Exchange Pumping Plant and Canal, the Columbia River Pumping Plant, the Columbia-Cold Springs Canal, the Cold Springs Pumping Plant, the Stanfield Relift Pumping Plant, the Echo Pumping Plant, and associated conveyance features.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902; East and West Divisions, December 4, 1905; P.L. 46, Soil and Moisture Conservation, April 27, 1935; P.L. 85-624, Fish and Wildlife Coordination Act of 1958, August 12, 1958; P.L. 93-205, Endangered Species Conservation Act, December 28, 1973, as amended; P.L 94-228, McKay Dam Modifications authorized by the Reclamation Authorization Act of 1975, March 11, 1976; P.L. 97-293, Title II, Reclamation Reform Act, October 12, 1982, as amended; P.L. 100-557, and Water Exchange Facilities, October 28, 1988.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$106,000	\$73,000
Land Management and Development	255,000	255,000
Fish and Wildlife Management and Development	167,000	175,000
Facility Operations	2,350,000	2,307,000
Facility Maintenance and Rehabilitation	112,000	40,000
Request	\$2,990,000	\$2,850,000
Non-Federal	120,000	134,000
Prior Year Funds	0	0
Total Program	\$3,110,000	\$2,984,000
Prior Year Funds/Non-Federal/Other Federal	(120,000)	(134,000)
Total Reclamation Allotment	\$2,990,000	\$2,850,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Project Water Conservation Assistance — Continues to provide project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts and with city, county, and State governments within Reclamation lands. The program provides measurable water management benefits through technical assistance with districts to encourage efficient use of water supplies and water conservation to aid in the protection of threatened and endangered species within the Umatilla Project.

Water Quality Improvements - Continues data collection and water temperature modeling in waterways and reservoirs to aid in the decision making for improving water quality in the basin. Water quality improvements benefit and directly support project operations with planning that is necessary to provide long-term water management and delivery capability. Other - Continues general area management activities including initial contacts with districts and responses to outside entities on general project management. Continues management support for planning activities. Decrease due to a reduction in labor requirements for oversight of the Water Conservation Field Services program.

\$73,000

Land Management and Development - Continues general land management activities. All of the facilities are federally owned and under Reclamation's jurisdiction. Activities include coordinating land resource management activities with the irrigation districts, citizen planning groups, and other Federal agencies where planning, recreation, and community development will affect Reclamation lands and facilities. Continues issuing land use authorizations as requested by the public and other governmental agencies and meeting cultural resource management needs and commitments. Continues environmental audit activities.

255,000

Fish and Wildlife Management and Development - Continues to respond to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on the project. Continues review of other agencies' National Environmental Policy Act documents and plans which may affect Reclamation's project operations. Biological Opinion (BiOp) Implementation - Continues coordinating and reporting implementation actions required in the existing National Oceanic Atmospheric Administration Fisheries (NOAA Fisheries) BiOp on the Umatilla Project's operations and maintenance. Continues compliance with Reasonable and Prudent Measures from NOAA Fisheries BiOp and U.S. Fish and Wildlife BiOp to reduce take of listed species. Expected requirements and recommendations include temperature, water quality, stream flow data collection and studies, fish monitoring in cooperation with Tribes and state, and fish injury and mortality assessment, improvement, and monitoring. This activity includes conferencing or consultation activities which arise from new species listings, critical habitat designations, and project operation changes.

Facility Operations - Continues day to day operations and maintenance at McKay Dam and Reservoir and the Federal water exchange facilities. The exchange facilities provide Columbia River water to three irrigation districts. In exchange, those districts agree to reduce or eliminate their diversions from the Umatilla River, thereby restoring instream flows for anadromous fish. Continues flood control operations, hydromet system operations and maintenance, water quality monitoring, and river operation coordination with the basin stakeholders. Continues the review, evaluation, and revision of Standard Operating Procedures and Emergency Action Plans for Umatilla facilities. Continues Umatilla Supervisory Control and Data Acquisition (SCADA) system operations and maintenance, and the annual Certification and Accreditation of the Umatilla SCADA system to comply with Reclamation's Federal Information Security Management Act requirements.

2,441,000
Non-Federal - Water Users

(134,000)

Non-Federal - Water Users Subtotal, Facility Operations

2,307,000

Facility Maintenance and Rehabilitation - Continues funding for High and Significant Hazard Dams reviews and examinations (Annual Site Inspections, Periodic Facility Reviews, etc.). Continues dam

instrumentation oversight, data tracking, and general investigations. Significant decrease in funding requirement due to the completion of painting at Cold Springs, Stanfield Relift, and Echo Pumping Plants in FY 2016.

Reclamation Request \$2,850,000

Washington Area Projects

LOCATION: This project encompasses several Reclamation projects in Washington, Idaho, and Montana. These projects include: Chief Joseph Dam Project, located in Chelan, Douglas, and Okanogan Counties; Okanogan Project, located in Okanogan County; Spokane Valley Project, located in Spokane County (Washington) and Kootenai County (Idaho); Rathdrum Prairie Project located in Kootenai County; Bitter Root Project located in Ravalli County; Frenchtown Project and Missoula Valley Project, located in Missoula County (Montana).

DESCRIPTION/JUSTIFICATION: Reclamation has oversight and management responsibilities for projects that have been transferred to water user organizations for operations and maintenance. Funding for the Washington Area Projects will provide for activities in the area of land resources management, flood control, environmental work, water conservation, technical services, and recreation.

AUTHORIZATION: Reclamation Act of 1902, July 17, 1902; P.L. 506, Rehabilitation of Bitter Root Project, July 3, 1930; P.L. 327, Amend Rehabilitation of Bitter Root Project, August 26, 1935; P.L. 260, Reclamation Project Act of 1939, August 12, 1940; P.L. 136, Interior Department Appropriations Act of 1942, June 28, 1941; P.L. 56, Amended Contracts, Miscellaneous Projects, May 6, 1949; P.L. 402, Amended Contracts Miscellaneous Projects, June 23, 1952; P.L. 172, Interior Department Appropriation Act of 1954, July 31, 1953; P.L. 289, Credits to Certain Irrigation Districts, January 30, 1954; P.L. 465, Interior Department Appropriation Act of 1955, July 1, 1954; P.L. 82-577, Foster Creek Division, Chief Joseph Dam Project, July 27, 1954; P.L. 641, Public Works Appropriation Act of 1957, July 2, 1956; P.L. 85-393, Greater Wenatchee Division, May 5, 1958; P.L. 86-276, Spokane Valley Project, September 16, 1959; P.L. 86-700, Public Works Appropriation Act of 1961, September 2, 1960; P.L. 87-289, Rehabilitation Work, Hayden Lake Districts, September 22, 1961; P.L. 87-630, Spokane Valley Project, amended September 5, 1962; P.L. 87-762, Oroville-Tonasket Unit (Okanogan-Similkameen Division), October 9, 1962; P.L. 88-315, Amended Contract with Big Flat Irrigation District, May 28, 1964; P.L. 88-599, Whitestone Unit, September 18, 1964; P.L. 89-557, Chelan Division (Manson Unit), September 7, 1966; P.L. 89-561, Feasibility Studies, September 7, 1966; P.L. 91-286, East Greenacres Unit, Rathdrum Prairie Project, June 23, 1970; P.L. 93-97, Public Works for Water and Power Development and Atomic Energy Commission Appropriation Act of 1974, August 16, 1973; and P.L. 95-18, Emergency Drought Act, April 7, 1977.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$85,000	\$74,000
Land Management and Development	290,000	295,000
Fish and Wildlife Management and Development	40,000	90,000
Facility Operations	60,000	64,000
Request	\$475,000	\$523,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$475,000	\$523,000
Prior Year Funds/Non-Federal/Other Federal	0	0
Total Reclamation Allotment	\$475,000	\$523,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - <u>Project Water Conservation Assistance</u> — Continues providing measurable water management benefits through technical assistance with districts to encourage more efficient use of water supplies and the practice of water conservation to aid in the protection of threatened and endangered species on the Washington Area Projects. <u>Other</u> - Continues program management support for planning activities. \$74,000

Land Management and Development - Continues general land management activities within the various project boundaries including environmental compliance activities, resolving trespass issues, conducting field reviews of the project land base, resolving boundary disputes, repairing and replacing boundary markers, and coordinating land resource management activities with the U.S. Forest Service, Bureau of Land Management, and Washington State Parks. Continues managing recreation use at Conconully Lake and Reservoir within the Okanogan Project. Continues administering land use permits such as cabin sites and rights-of-way. Continues administering leases including grazing and gravel pits.

295,000

Fish and Wildlife Management and Development - Continues assistance to non-Reclamation entities for resource monitoring/inventory efforts. Continues project involvement to respond to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on the project. Continues review and preparation of environmental compliance documents and checklists for proposed minor actions by cooperators. Continues interagency coordination on work conducted by others that may affect project operations or facilities. Continues review of other agencies' National Environmental Policy Act (NEPA) documents and plans which may affect project operations. Biological Opinion (BiOp) Implementation - Continues implementing Endangered Species Act (ESA) Section 7(a) (2) and Magnuson-Stevens Act Section 305(b) (2) actions resulting from the Okanogan Project National Marine Fisheries Service BiOp. Continues coordination for reporting and implementation action under the final biological opinion. Increase due to implementation actions which involve coordination, reporting and negotiation participation in support of the final biological opinion. Negotiations will occur with The Confederated Tribes of The Colville, Okanagan Irrigation District and NMFS to purchase water which will enhance instream flows for listed steelhead through the lower 4.3 miles of Salmon Creek.

90,000

Facility Operations – Continues oversight and engineering review of Federal facilities transferred to non-Federal irrigation districts for operations and maintenance. Continues coordination and review of proposed system changes and potential rehabilitation or replacement of structures that have served their useful life.

64,000

Reclamation Request \$523,000

Yakima Project

LOCATION: South central Washington on the East Side of the Cascade Range and includes most of Yakima, Kittitas, and Benton Counties.

DESCRIPTION/JUSTIFICATION: Project features include: Bumping Lake Dam and Bumping Lake, Kachess Dam and Kachess Lake, Keechelus Dam and Keechelus Lake, Clear Creek Dam and Clear Lake, Teton Dam and Rimrock Lake, Cle Elum Dam and Cle Elum Lake; two hydroelectric power plants, and a variety of diversion dams, pumping plants, canals, fish ladders and screens, and distribution systems. The project provides irrigation water for approximately 464,000 acres, with water distribution systems operated by the water users. The two hydroelectric power plants have a combined generating capacity of 25,000 kilowatts and an average annual generation of about 115 million kilowatt-hours.

The request includes funding for operation and maintenance of Phase I fish facilities. Funding for the operation and maintenance of the Phase II fish facilities is provided by Bonneville Power Administration (BPA). BPA, through a separate Memorandum of Agreement, directly funds power operation and maintenance costs. In addition, BPA directly funds through subagreements, major power replacements, additions, and improvements.

AUTHORIZATION: P.L. 57-161, Reclamation Act of 1902, June 17, 1902; P.L. 80-629, Kennewick Division Yakima Project, June 12, 1948; P.L. 85-624, Fish and Wildlife Coordination Act of 1958; P.L. 91-66, Kennewick Division Extension, August 25, 1969; P.L. 93-205, Endangered Species Act of 1973, December 28, 1973 as amended; the Reclamation Reform Act of 1982, as amended; P.L. 98-381, A Bill to Authorize the Secretary of the Interior to Construct, Operate, and Maintain Hydroelectric power plants at Various Existing Water Projects, and for other Purposes, August 27, 1983; Authority to accept funding from Bonneville Power Administration is found under P.L. 102-486, Section 2406 of the Energy Policy Act of 1992, October 24, 1992; P.L. 102-575, Reclamation Projects Authorization and Adjustment Act of 1992, October 30, 1992; P.L. 103-434, Yavapai-Prescott Indian Tribe Water Rights Settlement Act, October 31, 1994; and P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$215,000	\$140,000
Land Management and Development	455,000	370,000
Fish and Wildlife Management and Development	117,000	594,000
Facility Operations	5,200,000	5,204,000
Facility Maintenance and Rehabilitation	1,584,000	36,000
Request	\$7,571,000	\$6,344,000
Non-Federal	1,235,000	1,278,000
Other Federal - BPA Direct Funding	3,188,000	3,207,000
Other Federal - BPA Subagreement	1,160,000	0
Other Federal - BPA Small Capital	175,000	105,000
Other Federal - BPA Multipurpose	0	250,000
Other Federal - BPA Fish Facility	115,000	115,000
Other Federal - Bureau of Indian Affairs	605,000	540,000
Prior Year Funds	0	0
Total Program	\$14,049,000	\$11,839,000
Prior Year Funds/Non-Federal/Other Federal	(6,478,000)	(5,495,000)
Total Reclamation Allotment	\$7,571,000	\$6,344,000

WORK PROPOSED FOR FY 2017:

activities.

Continues project-wide support for planning, design, and implementation of effective water management and conservation measures with Reclamation water districts and with city, State, and county governments within Reclamation lands. The program provides measurable water management benefits through technical assistance and cost-share grants with districts to encourage more efficient use of water supplies and the practice of water conservation to aid in the protection of threatened and endangered species on the Yakima Project. Other - Continues development of the Watershed and River System Management Program (WARSMP) for the Yakima Project. WARSMP includes Data Management Interfaces, River Ware, Hydrologic Database, ET-Toolbox, and Modular Modeling System. As the WARSMP tools are developed and refined, they will provide functional tools to operate and monitor real-time operations of the Yakima Project on the Yakima River. Continues program management support for planning

Water and Energy Management and Development - Project Water Conservation Assistance -

\$180,000 Non-Federal - Various (40,000)

Subtotal, Water and Energy Management and Development

\$140,000

Land Management and Development - Continues management of project lands, including general maintenance such as fencing and weed control, maintenance of restored land acquired for habitat enhancement of salmonid species, and administrative functions such as issuing land use authorizations as requested by the public and other governmental agencies, resolving trespass issues, responding to land ownership questions, obtaining easements as needed for project operations, acquiring and disposing of land interest for project purposes, cleaning up dump sites that may contain hazardous waste, conducting surveys for cultural resources, conducting field reviews of project lands, and maintaining existing land

records. Continues Geographic Information System data analysis and utilization updates, as well as dissemination of data, for project needs. Continues to ensure proper and consistent management of the museum property in compliance with Federal laws, regulations, and the Department of the Interior initiatives.

370.000

Fish and Wildlife Management and Development - Continues project involvement to respond to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on the project. Continues review of other agencies' National Environmental Policy Act documents and plans, which may affect project operations. Biological Opinion (BiOp) Implementation - Begins conducting measurements and evaluation of channel morphology as reservoir flows fluctuate to show when bull trout passage impediments occur. Begins the trap and transport program by conducting hydroacoustic monitoring, snorkeling surveys, and statistical analysis, for bull trout population estimates downstream of the reservoirs. Begins installing telemetry receivers at Chandler fish passage, which will mark and track Steelhead Smolt as they pass through the facility. Continues monitoring of operational changes at Roza Dam to investigate how varying flow levels in the by-pass reach, below the dam, affect steelhead. Continues work on the biological implementation actions coordinating and reporting pending final biological opinion. Increase due to requirements of the pending Yakima Project consultation with the National Marine Fisheries Service and U.S. Fish and Wildlife Service.

Facility Operations - Continues operations and maintenance of six-storage dams and reservoirs and associated canals and distribution facilities, as well as the hydromet system (real-time monitoring) and gauging stations for water delivery and flood control operations. Continues operation and maintenance of Phase I and Phase II fish screens and ladders. Continues funding security activities within the boundaries of the Yakima Project. Continues operational data collection in the Yakima River and six-storage reservoirs to evaluate project operations effect on endangered salmon and trout.

Power Items - Continues day-to-day operations and maintenance	e of Roza and Chandler Power Plants
under the direct funding agreement with BPA.	10,659,000
Other Federal - BPA Direct Funding	(3,207,000)
Other Federal – BPA Multipurpose	(250,000)
Other Federal - BPA Small Capital	(105,000)
Other Federal - Fish Facility Operations and Maintenance	(115,000)
Other Federal - Bureau of Indian Affairs	(540,000)
Non-Federal - Water Users	<u>(1,238,000)</u>
Subtotal, Facility Operations	5,204,000

Facility Maintenance and Rehabilitation - Continues required annual inspections of High and Significant Hazard Dams and technical assistance to operating entities for completion of operations and maintenance recommendations resulting from the Associated and Dam Facility Reviews and assistance with selection of the proper methods and materials to assure compliance with Reclamation standards. Decrease due to completion of the replacement of the Chandler Trash Rake System and change in the schedule for the replacement of Roza fish screens.

36,000

Reclamation Request \$6,344,000

Yakima River Basin Water Enhancement Project

LOCATION: South central Washington on the east side of the Cascade Range and includes most of Yakima, Kittitas, and Benton Counties.

DESCRIPTION/JUSTIFICATION: This project will evaluate and implement cost-effective structural and nonstructural measures that have a strong Federal interest to increase the reliability of the irrigation water supply and enhance stream flows and fish passage for anadromous fish in the Yakima River Basin. Facility modifications, implementation of diversion reduction measures, the purchase or lease of land, water, or water rights from willing sellers for habitat improvements, habitat restoration, and changes in operations, management, and administration may be implemented to reduce the demand on the available water supply. In exchange for 65 percent Federal cost share, two-thirds of the water conserved under the Basin Conservation Program, the project's central feature, will remain instream and will be used to increase flow requirements for anadromous fish. The current plan also includes improvements to tribal water supply systems, enhancement of the Toppenish Creek Corridor, and an irrigation demonstration project for the Yakama Nation to enhance tribal economic, fish, wildlife, and cultural resources.

AUTHORIZATION: P.L. 96-162, Feasibility Study, Yakima River Basin Water Enhancement Project, December 28, 1979; P.L. 98-381, Hoover Power Plant Act, August 17, 1984; Title XII of P.L. 103-434, Yavapai-Prescott Indian Water Rights Settlement Act, October 31, 1994, as amended by P.L. 105-62, October 13, 1997, and P.L. 106-372, October 27, 2000.

COMPLETION DATA: As of September 30, 2015, the project will be forty-one percent complete. This is a two percent increase from FY 2016 Justifications. This construction-related figure is based largely on funding authorized and indexed for inflation. This can be misleading because this is not a true "construction" program but is largely a grant program for water conservation with some facility modifications. Nearly all planning has been completed for water conservation activities including the on-reservation planning. Many of the proposed projects are being implemented or moving closer to the implementation phase. Many of the program accomplishments may not result in significant construction elements. Fishery habitat restoration measures under the authorizing legislation may, in many cases, only require the acquisition of key habitat features. No definite date for completion is established for program elements under the authorizing legislation, but water conservation work is expected to be essentially complete by 2032. Habitat enhancement and acquisition activities and on-reservation project work are expected to continue for some time.

Recently completed activities include: Eight basin conservation plans are now complete. One or two planning applications are expected in the future. Five feasibility level conservation plans and one more is scheduled to be completed in FY 2016. Three large conservation projects are currently in the implementation phase as a result of funding agreements between Reclamation, Washington State Department of Ecology (Ecology), and the irrigation districts. Construction of the Sunnyside Division Board of Control (SDBOC) Phase I began in 2004 and was completed in 2013. Implementation of SDBOC's Phase II water conservation plan began in FY 2009 with the American Reinvestment and Recovery Act (ARRA) funds. As a result, a significant portion of the SDBOC Phase II conservation implementation plan was completed in FY 2012. In FY 2012, Reclamation entered into a three party agreement with Ecology and SDBOC to continue construction of the SDBOC Phase II conservation implementation plan through FY 2017. A significant portion of the FY 2012 SDBOC Phase II is planned to continue over a 20-year period, scheduled for completion in 2032. Construction of the Benton Irrigation District project was started in 2009 and is expected to be completed in FY 2016. Reclamation entered into an agreement in FY 2013 with Ecology and the Roza Irrigation District to begin construction of a 1,600 acre-foot reregulation reservoir as identified in their conservation feasibility study. The agreement is expected to be completed in FY 2019. Water acquisition target goals and deadlines set forth in the authorizing legislation were met ahead of schedule. The Project has acquired 1,926 acres of fish and wildlife habitat and enhancement activities are underway.

On-reservation Tribal studies for water supply system modifications and improvements are complete and the Secretary of the Interior has certified that the Satus Creek improvements are consistent with the water conservation objective of the legislation. Implementations of the Satus Creek improvements are expected to take nine years. The Draft Toppenish Creek Corridor Enhancement Plan was complete in June 2012. Following Tribal Council approval, the enhancement plan will be submitted to the Secretary for certification.

Tributary improvements to Teanaway River are complete and land and water acquisition on Taneum Creek are complete. Teanaway River improvements, along with Yakama Nation's fish enhancement efforts, have led to increases in salmon redds from a previous average of one redd per year to current levels in excess of 100 redds per year in good water years. Taneum Creek improvements have removed barriers and improved access of critical habitat for migrating fish from 1.8 miles to 30 miles. In 2013, a tributary enhancement plan was completed for Manastash Creek and implementation of enhancement activities to increase instream flows are on-going. Tributary enhancements to Cowiche Creek have been implemented using Washington State and Bonneville Power Administration funding. Levee setback and habitat restoration was completed in 2012 on the Kampgrounds of America, Inc. property in the Gap-to-Gap Reach of the Yakima River near the City of Yakima. Further levee setbacks will continue in the Gap-to-Gap Reach near Yakima and in the Schaake reach near the City of Ellensburg. Actual enhancement activities may occur with funding from other agencies. Teanaway River restoration was accomplished using Bonneville Power Administration funding and a levee setback on the Yakima River was accomplished by the U.S. Army Corps of Engineers.

The Manastash Creek Project (Lateral South Branch – 13.8 Rehabilitation and Consolidated Pipeline – East/West), which was designed to increase instream flows was completed in 2014. The Cle Elum Pool Raise and the Cle Elum Dam Fish Passage final designs were completed in FY 2015. Reclamation and the State of Washington entered into a Memorandum of Understanding in July 2014, to fund the construction of the Cle Elum Dam Fish Passage Facilities. Construction of the fish passage facilities began in FY 2015. Subsequent construction contracts are anticipated in FY 2016-2018 to advance fish passage facilities and pool raise. Design data collection continues on water reliability projects and operational improvements including: the Kachess Drought Relief Pumping Plant and the Keechelus-to-Kachess Conveyance which are anticipated to be implemented by the irrigation districts. The State of Washington, in their biennial budget for 2015 to 2017, contributed \$30 million towards furthering the Yakima River Basin Integrated Water Resource Management Plan elements.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$12,811,000	\$15,799,000
Request	\$12,811,000	\$15,799,000
Non-Federal	6,577,000	6,856,000
Prior Year Funds	0	0
Total Program	\$19,388,000	\$22,655,000
Prior Year Funds/Non-Federal/Other Federal	(6,577,000)	(6,856,000)
Total Reclamation Allotment	\$12,811,000	\$15,799,000

Explanation of Significant Changes in Funding: The YRBWEP program funding is increased by \$2,988,000. The increase will be used to further construction of the Cle Elum Fish Passage.

Total Cost Information*

	Total Estimated	Total to			Balance To
	Cost	9/30/15	FY 2016	FY 2017	Complete
Reclamation	\$409,946,872	\$181,951,182	\$12,811,000	\$15,799,000	\$199,385,690
Adjustments1/	117,085,501	67,573,977	6,577,000	6,856,000	36,078,524
Total	\$527,032,373	\$249,525,159	\$19,388,000	\$22,655,000	\$235,464,214

^{*}Includes costs associated with the authorized appropriation ceiling.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Fish and Wildlife	\$525,449,657	\$527,032,373
Total 1/	\$525,449,657	\$527,032,373

Total includes various study investigations costs and National Environmental Policy Act costs as authorized by P.L. 103-434.

METHODOLOGY: Increase in total cost from FY 2016 is due to Reclamation funding. Non-Federal contributions increased due to increase in contribution from cost share partners.

APPROPRIATION CEILING: Total Federal appropriations authorized for all Yakima River Basin Water Enhancement Project activities are \$409,946,872 (October 2016). The comparable Federal obligation is \$409,946,872 which is adequate to complete the project as currently authorized.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Implementation - Water and Land Acquisition - Continues funding to purchase permanent water rights and habitat from willing sellers, within the main stem of the Yakima River in the Gap-to-Gap Reach (Union Gap-Selah Gap), Kittitas Reach, and tributaries to the Yakima River with high potential for improved fisheries. The specific purpose for acquisition is to provide instream flows and other benefits to anadromous fish. With listed species in the basin, it is important for Reclamation to consider various options within the project guidelines for

^{1/} Non-Federal contributions by State and local interests.

improving instream flows and acquiring land with high potential for improved habitat. An opportunity to acquire water and habitat through various methods, without affecting existing irrigation, provides direct benefits to the basin fishery. Target acreage for acquisition will be approximately 350 acres with appurtenant water rights. Tasks include permitting, finalizing partnership agreements, and beginning the contracting process. Solicitations are created and awarded when funds become available.

\$500,000

Restoration/Enhancement - Continues significant restoration activities on the Wapatox Canal by implementing canal improvements to correct existing deficiencies and minimize diversions. Restoration is necessary to reduce potential for failure of the aging Wapatox Canal to continue Reclamation's obligation to deliver irrigation water to Wapatox irrigators and maximize instream flows by reducing diversions for carriage waste. Continues significant work associated with restoration and enhancement on the Schaake property located in the Lower Kittitas Reach of the Yakima River. Schaake implementation includes levee setback, side channel enhancement for improved fish habitat, and reconnecting flood plains. Continues work associated with restoration, weed control, fencing or fence removal, vegetative management, removal of fish barriers, construction of side channel habitat, levee removal or relocation, monitoring to establish restoration direction, and development of conservation or restoration plans on acquired lands. Current areas of focus include the Roy, McCormick, and Gerdes properties and other potential acquisitions within the Union Gap Reach of the Yakima River. Yakima County is working with the U.S. Army Corps of Engineers and numerous other local entities to set back or remove levees within this reach, which would create potential areas for restoration or enhancement. Continues work associated with restoration of the Lower Wenas property located at the confluence of Wenas Creek and the Yakima River. 2,050,000

Irrigation District Implementation/Grants - Continues work associated with development and monitoring of irrigation district implementation grants and continues work to complete water right change applications for each water right or block of conserved water acquired through conservation implementation. Continues grants to SDBOC to implement Phase II of their conservation measures and to the Roza Irrigation District for construction of a reregulation reservoir as provided by their respective feasibility studies and to monitor the effects on river diversions of those specific conservation measures. The Sunnyside grant activities are a major feature of the settlement between the Federal Government, State of Washington, Yakama Nation, and the Sunnyside Division of Reclamation's Yakima Project regarding the water rights claims of the Division in the Yakima Basin general stream adjudication. Grants to participating districts for implementation of their respective conservation measures are significant in size and cost. Launching into the implementation phase will require significant funding and specific monitoring activities in order to evaluate success at achieving reductions in diversions and increases in instream flows. Reclamation's responsibility to continue its basic mission in delivering irrigation water to contract customers will remain.

5,356,000

Non-Federal - State of Washington and local entities $(\underline{1,856,000})$ 3,500,000

<u>Water Supply Reliability</u> - Continues coordination with the irrigation districts and State of Washington to implement projects to increase the reliability of the irrigation water supply by investigating alternatives, including inactive storage and operational improvements at existing reservoirs. The funding would be used for environmental compliance, permitting, mitigation, and enhancement projects. If pending non-Federal funding agreements are completed and construction begins, funding would be used to provide construction oversight.

2,000,000

<u>Fish Passage</u> - Continues operations and maintenance of interim downstream fish passage facilities at Cle Elum Dam. Operations and maintenance items include manipulation of stop logs and control gates to

regulate passage flows, maintenance of electrical and electronic systems, repairs and maintenance to flume structures, and installation and removal of passive integrated transponder tag detectors, etc. Continues construction of the Cle Elum Dam permanent fish passage facilities which contributes towards Reclamation's obligation for fish passage in accordance with the Yakama Nation Settlement Agreement; addresses Washington State permit conditions that resolve disputes related to not providing fish passage at Keechelus Dam in conjunction with major Safety of Dams work; and also addresses Washington State's fish passage issues involving anadromous salmon species listed under the Endangered Species Act (ESA). Implementation of passage features at the dams should increase populations of upper basin steelhead, Coho salmon, and Chinook salmon; restore life history and genetic diversity of salmon; reintroduce sockeye salmon to the watershed; and reconnect isolated populations of bull trout. Twospecies, bull trout and Mid-Columbia steelhead, are listed under the ESA. 11,399,000 Non-Federal – State of Washington (5,000,000)

6,399,000

Conservation Advisory Group (CAG) - Continues coordination with the CAG as provided in the authorizing legislation. The CAG is a Federal Advisory Committee Act group that advises the program manager on aspects of projects related to the Basin Conservation Program. 6,000

Toppenish Creek Corridor - Continues work with the Yakama Nation on a P.L. 93-638 Indian Self Determination and Education Assistance Act (construction contact) for implementation of the Toppenish Creek Corridor Plan. The tributary rehabilitation plan was developed by the Yakama Nation. Funding will be used to remove a diversion dam from the creek and restore associated habitat.

381,000

Wapato Irrigation Project Implementation - Continues implementation of the Yakama Nation's Satus Creek water conservation improvements. Specific tasks include final acquisition of easements, obtaining permits, and design of the pressurized pipeline for irrigation. 363,000

Tributary Program - Continues developing and funding projects to improve fish passage easements, instream flows, irrigation water supplies, and habitat conditions in Yakima basin tributary streams. Conduct studies and provide technical expertise on fisheries related issues associated with the restoration of basin tributaries including Blue Slough, Manastash, Wenas, Cowiche, Taneum, Wilson, and Naneum creeks. 600,000

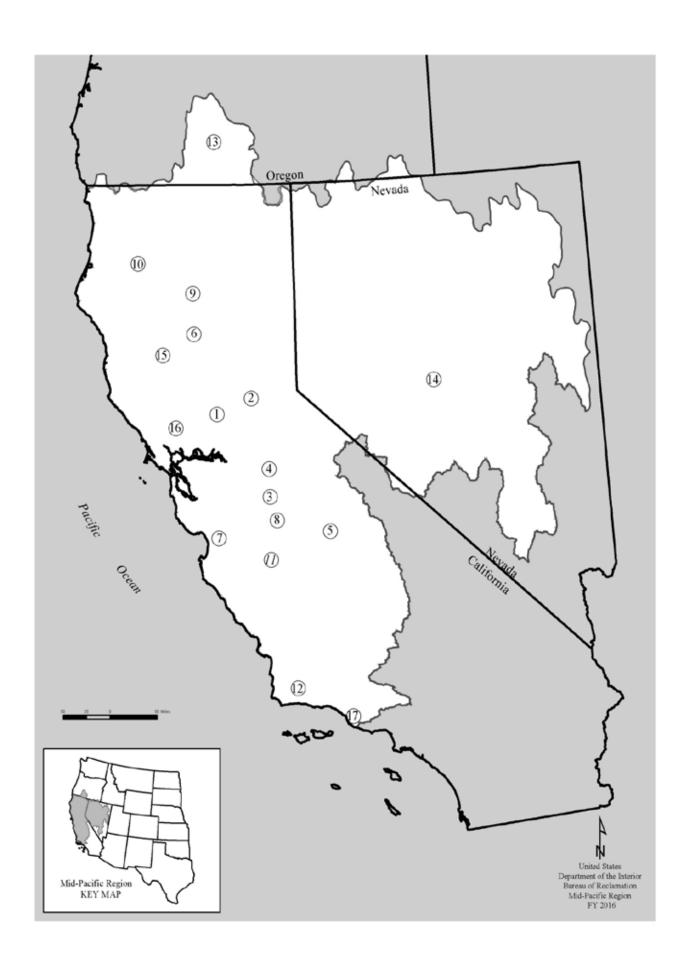
Reclamation Request \$15,799,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2015

Status of NEPA Compliance

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MID-PACIFIC REGION PROJECTS AND PROGRAMS MAP KEY

Central Valley Project:

- 1. American River Division
- 2. Auburn-Folsom South Unit
- 3. Delta Division
- 4. East Side Division
- 5. Friant Division
- 6. Sacramento Division
- 7. San Felipe Division
- 8. San Joaquin Division
- 9. Shasta Division
- 10. Trinity River Division
- 11. West San Joaquin Division, San Luis Unit

Other Projects:

- 12. Cachuma Project
- 13. Klamath Project
- 14. Lahontan Basin Project
- 15. Orland Project
- 16. Solano Project
- 17. Ventura River Project

FY 2017 Mid Pacific Region Budget Summary									
		(\$ in tho	usands)						
					F	Y 2017		_	
	FY 2016	Water &	Land	Fish &	Facility	Facility	FY 2017	Other Fed/	Total
Project	Enacted ^{1/}	Energy	Mgmt.	Wildlife	Oper.	Maint.	Request	Non-Fed	Program
Cachuma Project	1,321	295	301	51	635	39	1,321	0	1,321
Central Valley Projects (CVP):									
American River Division	10,715	1,266	311	0	8,888	0	10,465	6,124	16,589
Auburn-Folsom South Unit	2,219	0	35	0	2,056	0	2,091	0	2,091
Delta Division	11,229	2,631	201	2,636	5,477	34	10,979	0	10,979
East Side Division	4,062	783	507	0	2,544	100	3,934	2,100	6,034
Friant Division	40,593	966	523	703	3,256	17	5,465	0	5,465
Friant Division	5,593	966	523	703	3,256	17	5,465	0	5,465
San Joaquin River Restoration ^{2/}	35,000	0	0	0	0	0	0	0	0
Miscellaneous Project Programs	8,050	6,955	1,449	185	274	180	9,043	46,106	55,149
Replacements, Additions, & Extra. Maint. Prog (RAX)	20,262	0	0	0	0	16,362	16,362	10,000	26,362
Sacramento River Division	2,251	811	208	288	694	0	2,001	0	2,001
San Felipe Division	447	124	80	67	4	71	346	0	346
San Joaquin Division	52	0	0	52	0	0	52	2,300	2,352
Shasta Division	9,378	336	104	280	8,530	0	9,250	13,000	22,250
Trinity River Division	17,486	294	104	11,780	5,177	0	17,355	7,040	24,395
Water and Power Operations	14,782	1,722	0	2,267	10,140	403	14,532	7,881	22,413
West San Joaquin Division, San Luis Unit	16,500	2,516	329	112	5,863	52	8,872	0	8,872
Subtotal - Central Valley Projects	158,026	18,404	3,851	18,370	52,903	17,219	110,747	94,551	205,298
Endangered Species Recovery Implementation	1,492	0	0	1,492	0	0	1,492	0	1,492
Klamath Project	18,000	3,189	1,380	6,810	3,225	1,396	16,000	1,500	17,500
Lahontan Basin Project	9,801	4,251	2,074	0	3,071	455	9,851	200	10,051
Lake Tahoe Regional Development Program	115	0	0	115	0	0	115	0	115
Orland Project	930	0	0	0	930	0	930	0	930
Solano Project	3,696	107	1,222	0	2,183	184	3,696	0	3,696
Ventura River Project	346	0	313	0	5	28	346	0	346
Total W&RR	193,727	26,246	9,141	26,838	62,952	19,321	144,498	96,251	240,749

^{1/} Public Law 114-113, the Consolidated Appropriations Act for 2016 provided Reclamation an additional \$166.3 million in six categories including Western Drought Response (\$100.0 million), rural water (\$47.0 million), and four other categories. At the time of budget preparation, these funds had yet to be distributed by program.

^{2/} The FY 2017 Budget proposes discretionary funds for SJRRP in a separate account, the San Joaquin River Restoration Fund. For 2016, funding was provided within Water and Related Resources in the CVP, Friant Division.

MID-PACIFIC REGION FY 2017 OVERVIEW

	FY 2017 BUDGET FOR WATER AND RELATED RESOURCES					
FY 2016 Enacted	Water & Energy	Land Management	Fish & Wildlife	Facility Operations	Facility Maintenance	Total Program
\$193,727,000	\$26,246,000	\$9,141,000	\$26,838,000	\$62,952,000	\$19,321,000	\$144,498,000

The Bureau of Reclamation Fiscal Year (FY) 2017 Budget for the Mid-Pacific Region (Region) for Water and Related Resources (W&RR) totals \$144.5 million. This is a decrease of \$49.2 million from FY 2016 due, in part, to the proposal to establish a separate current appropriation within the San Joaquin River Restoration Fund (SJRRF). Excluding the \$36.0 million for SJRRF, the remaining decreases include a \$7.6 million decrease resulting from a delay in the schedule for drainage services for the San Luis Unit as approved by the U.S. District Court. Additional reductions to Replacements, Additions, & Extraordinary Maintenance Program (RAX) of \$3.9 million are due to the completion of Tracy Pumping Plant 13.8 KV Breakers replacement, and Whiskeytown Oak Bottom Temperature Curtain Replacement. The reduction to the Klamath Project of \$2.0 million reflects reduced efforts on general stream water adjudications and portions of the Water Users Mitigation Program. Funding continues to be needed to maintain cooperative work with the Tribes, as well as water rights and Clean Water Act requirements.

The Region includes the lands drained by rivers flowing into the Pacific Ocean along the coast of California, north of the Tehachapi Mountains; drainage from the eastern slope of the Sierra Nevada Mountains to the northwestern Nevada and Humboldt River Basin within Nevada; and the Klamath River Watershed in southern Oregon and northern California. The Central Valley Project (CVP) accounts for \$110.7 million of the Region's \$144.5 million budget. The Klamath Project, Nevada's Lahontan Basin Project which consists of the Newlands, Humboldt, Washoe, and Truckee Storage projects, and California's Cachuma, Orland, Solano, and Ventura River projects all share in the increasing competition and conflict that grows out of the scarcity of water in the west. The budget provides the financial resources to deliver a limited water supply for a variety of uses including urban, industrial, agriculture, fish and wildlife habitat, wetlands, recreation, endangered species, water quality, and Native American Tribal Trust responsibilities.

The CVP is the nation's largest water management project and it extends from the Cascade Range in the north to the semi-arid but fertile plains along the Kern River in the south. Initial features of the project were built primarily to protect the Central Valley from crippling water shortages and menacing floods, but the CVP also improves the Sacramento River, supplies domestic and industrial water, generates electric power, conserves fish and wildlife, creates opportunities for recreation, and enhances water quality. The CVP serves farms, homes, and industry in California's Central Valley as well as major urban centers in the San Francisco Bay area; it is also the primary source of water for much of California's wetlands. In addition to delivering water for farms, homes, factories, and the environment, the CVP produces electric power and provides flood protection, navigation, recreation, and water quality benefits.

This multiple-purpose project plays a key role in California's powerful economy, providing water for six of the top ten agricultural counties in the nation's leading farm state. The CVP delivers 6 million acre-feet (af) of water in a normal year. The estimated value of crops and related service industries amounts to 100 times Congress' \$3.0 billion investment in the CVP. About 60 percent of the CVP cost was allocated to irrigation and municipal and industrial water with the remainder to other beneficial uses. After more than 100 years, Reclamation's primary role has evolved from one of water resource development to one of water resource management.

The Klamath and Lahontan Basin Projects also play a major role in western water issues including tribal trust responsibilities, endangered species protection, urban growth and expansion, changing land use, variable water supply, environmental issues, drought, and water quality.

The Region's challenge is to balance competing and often conflicting needs among water uses including urban, industrial, agriculture, fish and wildlife habitat, wetlands, recreation, endangered species, water quality, and Native American Tribal Trust issues. Some of the issues that confront the Region include urban growth, changing land use, variable water supply, increasing environmental requirements, drought, water quality, and litigation over competing water demands.

The **Water and Energy Management and Development** activity budget totals \$26.2 million. This includes \$18.4 million for the CVP. Funds support ongoing water marketing activities, National Environmental Policy Act (NEPA) compliance, water service contract renewals, water quality, groundwater monitoring, and water modeling.

Specific CVP funding includes:

- Continued studies in water quality monitoring and water marketing;
- CVP, West San Joaquin Division, San Luis Unit continues actions required under Federal Court
 for providing drainage service to the San Luis Unit. Funds will continue certain actions under the
 implementation plan of the 2007 Record of Decision (ROD) for the San Luis Drainage Feature
 Re-Evaluation, revised Control Schedule that supports the Demonstration Treatment Plant. Other
 Westland Control Schedule activities are suspended until January 2017.
- Continued participation in the Grassland Bypass Project (GBP). The GBP collects, manages, and reduces the volume of unusable subsurface agricultural drainage water produced in the 97,000 acre Grassland Drainage Area, and uses the San Luis Drain to convey it to Mud Slough, a tributary of the San Joaquin River. The GBP has resulted in significant improvements in water quality in the San Joaquin River and local wetlands and refuges. Reclamation will continue to implement the Use Agreement and meet the monthly and annual load values specified in the waste discharge requirement standards for the Grasslands Bypass Project (GBP).

The \$3.2 million budgeted for the Klamath Project continues to fund water quality monitoring and quality assurance programs, regulatory compliance activities, operations planning, and water rights mapping and administration.

The \$4.3 million budgeted for the Lahontan Basin Project continues Operating Criteria and Procedures (OCAP) compliance work for the Newlands Project to minimize the use of the Truckee River and maximize the use of the Carson River. Truckee River Operating Agreement (TROA) implementation continues in order to provide multiple benefits to Truckee River interests including cities, fishery and recreational interests, and the Pyramid Lake Paiute Tribe. Continues work associated with litigation and appeals processes of the Final Environmental Impact Statements and Environmental Assessments, Federal Rule, and modification to existing decrees.

The **Land Management and Development** activity budget totals \$9.1 million. The CVP budget includes \$3.9 million for ongoing efforts with management of land and natural resources including hazardous material management, encroachments and land use permitting, land resource protection, and land classification program.

The CVP, East Side Division includes \$507,000 for management and concession oversight of the recreation area at New Melones Lake.

The Solano Project includes \$1.2 million for management of the recreation area at Lake Berryessa.

The Klamath Project includes \$1.4 million to continue Reclamation's management of nearly 30,000 acres of land.

The Lahontan Project budget of \$2.1 million includes funds for the administration of 425,000 acres of land including activities dealing with monitoring, grazing leases, utility crossings, encroachments, easements, and abandonments; Humboldt Project, Title Transfer, Geographical Information System support, recreation management and hazardous waste management activities in the Newlands Project.

The **Fish and Wildlife Management and Development** activity budget totals \$26.8 million, which includes \$18.4 million for the CVP. The budget provides for numerous ongoing environmental initiatives throughout the Region. Activities include Endangered Species Act (ESA) implementation, ecosystem water models, fish monitoring, and evaluation programs. Major activities include:

- Funding of \$2.6 million for the CVP Delta Division, which consists in part of \$1.2 million for mitigation and protection of endangered species at the C.W. "Bill" Jones (formerly Tracy) Pumping Plant, and \$1.2 million for the Suisun Marsh Preservation;
- A budget of \$11.8 million for the CVP, Trinity River Restoration Program (TRRP), part of the America's Great Outdoors (AGO) Rivers Initiative which supports AGO's objectives to conserve, restore and connect people to the great outdoors; and
- The Klamath Project includes \$6.8 million for ESA activities for the 2013 Biological Opinion that will be implemented over 10 years, the Fish Studies Program; and Native American Affairs.

The **Facility Operations** activity budget totals \$63.0 million, which includes \$52.9 million for the CVP. The budgeted funds continue operations and maintenance (O&M) of dams, conveyance facilities, fish facilities, and associated infrastructure throughout the Region. Aging facilities present unique challenges and increased commitment of financial and manpower resources.

The **Facility Maintenance and Rehabilitation** activity budget totals \$19.3 million, which includes \$17.2 million for the CVP. The budgeted funds continue ongoing efforts to reduce the outstanding needs in the Region's Deferred Maintenance and CVP, Replacement, Additions, and Extraordinary Maintenance Program (RAX). The most critical items receive the highest priority. The CVP, RAX budget is \$16.4 million.

The **California Bay-Delta Restoration** budget in the amount of \$36.0 million implements priority activities pursuant to Title I of Public Law (P.L.) 108-361, the *CALFED Bay-Delta Authorization Act*, signed by the President on October 25, 2004. The Act authorized \$389.0 million in Federal appropriations for new and expanded authorities. Newly authorized activities in the legislation included:

- \$184.0 million for Conveyance Program activities, including new feasibility studies, water purchases, and implementation authority. Reclamation's Federal obligation is \$25.2 million.
- \$90.0 million for implementation of the Environmental Water Account. Reclamation's Federal obligation is \$8.5 million.

- \$90.0 million for implementation of levee reconstruction activities in the Delta, through the Secretary of the Army.
- \$25.0 million for oversight and coordination of the Program. Reclamation's Federal obligation is \$17.6 million.

New and expanded authorities authorized by P.L. 108-361 expire September 30, 2017. Appropriation language is proposed in the FY 2017 President's Budget to extend the expiration date for the expiring authorities and appropriations to September 30, 2018.

On December 22, 2009, six Federal agencies – the Department of the Interior, Department of Commerce, Department of Agriculture, Department of the Army, Environmental Protection Agency, and the Council on Environmental Quality – released the Interim Federal Action Plan (IFAP) for the California Bay-Delta. With this IFAP, the Federal agencies are describing in a single document a variety of Federal actions and investments that the Administration is undertaking in a coordinated fashion to help address California's current water supply and ecological crises. In December 2010, the six Federal agencies released the *Interim Federal Action Plan Status Update for the California Bay-Delta: 2011 and Beyond.* This request supports actions identified in the IFAP.

CVP Restoration Fund budget uses collections from water and power customers for fish and wildlife restoration, water management, and conservation activities as authorized under the Central Valley Project Improvement Act (CVPIA). The CVPIA, among other actions, amends previous authorizations of the CVP to add fish and wildlife protection, restoration, mitigation, and enhancement as project purposes. The CVPIA requires the Secretary of the Interior to assess and collect annual mitigation and restoration payments to recover a portion or all of the costs of restoration activities covered under the Act. Anticipated collections are used as the basis for formulating the Restoration Fund budget. The collections are appropriated by Congress prior to being available for obligation and expenditure. Estimated collections are \$55.6 million for FY 2017. The estimated appropriation is \$55.6 million for FY 2017. Funds collected in excess of the appropriation are unavailable until appropriated by Congress. Non-Federal cost-sharing and W&RR appropriations also support the implementation of CVPIA.

San Joaquin River Restoration Settlement Act provides for collections in the San Joaquin River Restoration Fund from the Friant Division Surcharges, Capital Component, and Water Sale Proceeds under Section 10009(c) of the Settlement Act (Title X, Subtitle A, Part I of Public Law 111-11) for the purposes of implementing the San Joaquin River Restoration Settlement in NRDC, *et al.*, *v. Rodgers, et al.* Funds will be used to continue implementation of significant actions called for in the Settlement. The Settlement Act provided \$88.0 million from the Restoration Fund to be available without further appropriation. The current schedule will exhaust the remaining balance of the \$88.0 million of mandatory funding in FY 2018. Without Congressional action, additional receipts in the Restoration Fund will not be available until after October 1, 2019. The Settlement Act also provides for up to \$300.0 million in authorization for appropriations to implement the Settlement and the Settlement Act. Discretionary funding of \$36.0 million is budgeted for FY 2017.

Planned Accomplishments in FY 2017 will include operating and maintaining facilities in a manner to achieve a good rating for 21 out of 37 of its high and significant hazard dams, and operate and maintain facilities in a manner to achieve a good rating for 7 out of 13 of its reserved works associated facilities. In 2017, the RAX Program will fund projects that correct known deficiencies, improve safety, and replace equipment that has reached its service life. Continuing projects are refurbishing butterfly valves and rehabilitate the Gianelli Pump/Generating Plant, refurbishing radial gates at Nimbus Dam, modifying the fish screen and the trash rack on Intake #3 at Coleman Fish Hatchery, overhauling the fixed-wheel gate at Trinity Dam, replacing two water quality monitoring stations at Staten Island and San Andreas in the

Delta, replacing two temperature curtains at Whiskeytown Reservoir, replacing station service transformers at Spring Creek, J.F. Carr and Trinity Powerplants, modifying the trash rake monorail structure and replacing the well water system at the Tracy Fish Collecting Facility, replacing UHA switchgear at Folsom Powerplant, repairing the access road to the surge tank at New Melones Dam, upgrading fire alarm systems at eight Northern California Area Office (NCAO) facilities, replacing unit excitation systems at Shasta and Keswick Powerplants, replacing the Antioch Fish Release Site at the Tracy Fish Collecting Facility, and rehabilitating the Tracy Field Office Administrative Building.

In 2017 planning, engineering, environmental compliance, fishery management, water operations, and public involvement activities will continue. The Region continues to support the Interagency Ecological Program (IEP) for the Sacramento-San Joaquin estuary for physical, chemical, and biological monitoring. There is presently an unprecedented decline in four fish species in the Sacramento-San Joaquin delta including the federally protected delta smelt. As highlighted in the IFAP for the California Bay-Delta and supported by the Federal Science Task Force, it is anticipated that activities will assist in identifying the causes and remedies to the fish decline in the delta. The Region continues water acquisition efforts through multiple agreements and partnerships. Mitigation continues for fisheries impacts associated with operation of the C.W. "Bill" Jones Pumping Plant, including identifying and recommending physical and operational improvements to the Tracy Fish Collecting as well as assessing present day fishery conditions at the facility, per the CVPIA, and Central Valley Project BiOps (ESA). The Trinity River Restoration Program (TRRP) continues implementation of a December 2000 ROD, including watershed restoration, gravel augmentation, and flow releases with three rehabilitation, five watershed projects and the restoration flow to development of a comprehensive monitoring and adaptive management program for fishery restoration.

Funding for the Klamath Project continues the planning, design, implementation, technical assistance, and construction activities to reduce entrainment at Project facilities, where feasible, and/or restore river and lake connectivity to allow fish to effectively migrate above and below Project dams. This activity funds both ESA and non-ESA studies to improve conditions affecting species production, survival, and recovery.

The Lahontan Office plans to continue implementation activities and/or support necessary for the TROA; continue work necessary to transfer remaining lands of the Humboldt Project to BLM; begin implementation of corrective actions for the safety of the Truckee Canal; and continue implementation of the Resource Management Plan for improved management of associated resources for the Newlands Project focusing on restoring any excess withdrawn lands to the public domain.

In the CVP, West San Joaquin Division, San Luis Unit, Reclamation will continue to implement actions provided for under the current Court Order and or subsequent Control Schedule if settlement discussions fail. Reclamation will implement the Settlement Agreement and any finalized Northerly District Agreement if enabling legislation is passed and signed into law and the San Luis Act is ultimately amended. In FY 2014, the Court granted the temporary suspension of activities in the Revised Control Schedule, except the activities related to the demonstration plant for a period of six months from the date of the Orders. On December 6, 2014, Westlands filed another motion requesting to further suspend the Revised Control Schedule for another six months. Following a request from the court for supplemental briefing by Westlands on the absence of harm to the public resulting from further delay, Reclamation filed a motion concurring that a further six-month partial suspension of the Revised Control Schedule within Westlands will not be adverse to the public interest. On September 15, 2015, Reclamation and Westlands signed a drainage Settlement Agreement which would require the enactment of federal authorizing legislation before the Settlement Agreement could be implemented. Following execution of the Settlement Agreement, on October 26, 2015 the Court granted a joint motion filed in conjunction with Westlands staying Reclamation's compliance with orders requiring Reclamation to provide drainage

service within Westlands until January 15, 2017. The requirement for filing six month status reports was upheld and remains an on-going bi-annual requirement.

Reclamation will continue to implement environmental monitoring and regulatory requirements in support of the Grassland Bypass Project ("GBP"), which uses a segment of the San Luis Drain to remove agricultural drainage from the Grassland Drainage Area under Waste Discharge Requirements established by the Regional Water Quality Control Board.

The CVP Restoration fund will continue to support actions to double the natural production of anadromous fish; deliver water supplies to maintain and improve 19 Federal, state, and local wetland habitat areas in the Central Valley; and address other adverse environmental impacts of the CVP in addition to continued support for the San Joaquin River and Trinity River Restoration Programs. Specific priorities include the construction of fish passage facilities on streams with critical habitat for ESA fish, construction of spawning and rearing fish habitat on streams below CVP facilities, construction for the final phase of the Clear Creek channel restoration effort, management of water releases for fisheries below CVP facilities, development of water supply facilities for the Sutter National Wildlife Refuge, delivery of refuge water supplies, and maintenance of long-term monitoring and analysis programs. The Habitat Restoration Program will continue to acquire and restore land to address the impacts of converting habitat to agricultural land as a result of the CVP.

The San Joaquin River Restoration Program Office will continue to implement actions called for in the Revised Framework for Implementation in FY 2017. The Program anticipates being able to release 700 cubic feet per second through the lower river and into Sacramento-San Joaquin Delta and make progress on seepage projects such that flows of up to 900 cubic feet per second can be conveyed to the lower river and Delta in FY 2018. The Program intends to complete final design and award a construction contract for clearing and grubbing and the Columbia Canal Syphon as part of the Mendota Pool Bypass and Reach 2B Channel Improvements Project. This will be a significant accomplishment in that it will be the first large river project under construction for the Program. In FY 2017, the Program also intends to release the Draft Environmental Impact Statement for the Reach 4B, Eastside Bypass and Mariposa Bypass Channel and Structural Improvements Project. FY 2017 will be the fourth year of direct spring-run Chinook salmon releases to the San Joaquin River and the second year of spawning the spring-run Chinook salmon broodstock currently in the Program's Conservation Facility. A variety of study efforts for fish actions will continue. To work towards implementing the Water Management Goal, the Program intends to release the Final Environmental Impact Statement for the Recapture and Recirculation Plan, begin construction of the Madera Canal Capacity Correction Project, and begin construction of the remaining groundwater banking facilities that utilize funds provided by the Program under Part III of Title X, Subtitle A of P. L. 111-11. The Program anticipates completing construction of the expanded water supply line to the Conservation Facility, the Gravel Pit 46e Isolation Project, and the Madera Canal Low Flow Valve Replacement Project in FY 2017.

California Bay-Delta Restoration Program: Shasta Lake Water Resources Investigation (SLWRI) – Reclamation continues with alternative operation studies, seeking up-front construction cost share partners, and developing cost share agreements with beneficiaries, consistent with the Final Feasibility Report (FFR). North-of-the-Delta Offstream Storage (NODOS) investigation – Reclamation continues coordination with study partners to develop a new, locally preferred alternative, and to complete the feasibility and environmental studies. Upper San Joaquin River Basin Storage Investigation (USJRBSI) - Reclamation continues with alternative operation studies, seeking up-front construction cost share partners, and developing cost share agreements with beneficiaries, consistent with the FFR. Los Vaqueros Expansion Feasibility Investigation, Phase 2 (LVE Phase 2) FFR and Environmental Impact Statement (EIS) are scheduled to be completed December 2016. The LVE Phase 2 investigation continues with alternative operation studies, seeking up-front construction cost share partners, and

developing cost share agreements with beneficiaries, consistent with the FFR. Bay-Delta Water Conservation plans to obligate \$3.0 million with a projected savings of 3,500 af per year. Yolo Bypass Salmonid Habitat Restoration and Fish Passage - Reclamation continues working on planning and environmental compliance process as well as ongoing stakeholder involvement towards implementing the Plan for the Yolo Bypass. California Water Fix - Continue activities associated with California Water Fix legal and permitting requirements including compliance with the Endangered Species Act, National Environmental Policy Act, Clean Water Act, and National Historic Preservation Act. Continues work on the California Water Fix adaptive management and monitoring element and operation plan.

Planned Accomplishments in 2016 will include operating and maintaining its facilities in a manner to achieve a good rating for 21 out of 37 of its high and significant hazard dams, and operate and maintain its facilities in a manner to achieve a good rating for 7 out of 13 of its reserved works associated facilities. In 2016, the RAX Program will fund projects that correct known deficiencies, improve safety, and replace equipment that has reached its service life. Continuing projects are refurbishing butterfly valves and rehabilitating Gianelli Pump/Generating Plant, replacing the 13.8kV breakers at the Tracy Pumping Plant, modifying the louver system at the Tracy Fish Collecting Facility, refurbishing radial gates at Nimbus Dam, replacing the water supply lines at the Nimbus Fish Hatchery, replacement and repainting the buss on the main unit transformer at the Keswick Powerplant, modifying the fish screen and the trash rack on Intake #3 at Coleman Fish Hatchery, replacing the Resources Management Building at CCAO, overhauling the fixed-wheel gate at Trinity Dam, replacing the fish-trap brail structure at Keswick Dam, modifying lift stations at New Melones Recreation Area, replacing two water quality monitoring stations at Staten Island and San Andreas in the Delta, replacing two temperature curtains at Whiskeytown Reservoir, replacing station service transformers at Spring Creek, J.F. Carr and Trinity Powerplants, modifying the trash rake monorail structure and replacing the well water system at the Tracy Fish Collecting Facility, replacing UHA switchgear at Folsom Powerplant, replacing governor oil pumps at Shasta Powerplant, upgrading fire alarm systems at eight NCAO facilities, replacing unit excitation systems at Shasta and Keswick Powerplants, and replacing the Antioch Fish Release Site at the Tracy Fish Collecting Facility.

In 2016 planning, engineering, environmental compliance, fishery management, water operations, and public involvement activities will continue. The Region continues to support the IEP for the Sacramento-San Joaquin estuary for physical, chemical, and biological monitoring. There is presently an unprecedented decline in four fish species in the Sacramento-San Joaquin delta including the federally protected delta smelt. As highlighted in the IFAP for the California Bay-Delta and supported by the Federal Science Task Force, it is anticipated that activities will assist in identifying the causes and remedies to the fish decline in the delta. The Region continues water acquisition efforts through multiple agreements and partnerships. Mitigation continues for fisheries impacts associated with operation of the C.W. "Bill" Jones Pumping Plant, including identifying and recommending physical and operational improvements to the Tracy Fish Collecting as well as assessing present day fishery conditions at the facility, per the CVPIA, and Central Valley Project BiOps (ESA). The TRRP continues implementation of a December 2000 ROD, including watershed restoration, gravel augmentation, and flow releases with three rehabilitation, five watershed projects and the restoration flow to development of a comprehensive monitoring and adaptive management program for fishery restoration.

Funding for the Klamath Project continues the planning, design, implementation, technical assistance, and construction activities to reduce entrainment at Project facilities, where feasible, and/or restore river and lake connectivity to allow fish to effectively migrate above and below Project dams. This activity funds both ESA and non-ESA studies to improve conditions affecting species production, survival, and recovery.

The Lahontan Office plans to continue activities and/or support necessary to begin the implementation of the TROA; continue work necessary to complete title transfer of the Humboldt Project; begin implementation of corrective actions for the safety of the Truckee Canal; and continue implementation of the Resource Management Plan for improved management of associated resources for the Newlands Project focusing on restoring any excess withdrawn lands to the public domain.

In the CVP, West San Joaquin Division, San Luis Unit, Reclamation will continue to implement actions provided for under the current Court Order and or subsequent Control Schedule if settlement discussions fail. Reclamation will implement the Settlement Agreement and any finalized Northerly District Agreement if enabling legislation is passed and signed into law and the San Luis Act is ultimately amended. As previously discussed in FY 2017 planned accomplishments, on September 15, 2015, Reclamation and Westlands signed a drainage Settlement Agreement which would require the enactment of federal authorizing legislation before the Settlement Agreement could be implemented. Following execution of the Settlement Agreement, on October 26, 2015 the Court granted a joint motion filed in conjunction with Westlands staying Reclamation's compliance with orders requiring Reclamation to provide drainage service within Westlands until January 15, 2017. The requirement for filing six month status reports was upheld and remains an on-going bi-annual requirement.

Reclamation will continue to implement environmental monitoring and regulatory requirements in support of the Grassland Bypass Project ("GBP"), which uses a segment of the San Luis Drain to remove agricultural drainage from the Grassland Drainage Area under Waste Discharge Requirements established by the Regional Water Quality Control Board.

The CVP Restoration fund will continue to support actions to double the natural production of anadromous fish; deliver water supplies to maintain and improve 19 Federal, state, and local wetland habitat areas in the Central Valley; and address other adverse environmental impacts of the CVP in addition to continued support for the San Joaquin River and Trinity River Restoration Programs. Specific priorities include the construction of fish passage facilities on streams with critical habitat for ESA fish, construction of spawning and rearing fish habitat on streams below CVP facilities, design and compliance for the final phase of the Clear Creek channel restoration effort, management of water releases for fisheries below CVP facilities, development of water supply facilities for the Sutter National Wildlife Refuge, delivery of refuge water supplies, and maintenance of long-term monitoring and analysis programs. The Habitat Restoration Program will continue to acquire and restore land to address the impacts of converting habitat to agricultural land as a result of the CVP.

The San Joaquin River Restoration Program Office will continue to implement actions called for in the Revised Framework for Implementation in FY 2016. The Program is working to complete a seepage project on one additional property in early FY 2016 such that flows of 300 cubic feet per second can be re-connected with the lower San Joaquin River and Sacramento-San Joaquin Delta. This would be the first time flows would reconnect from the upper San Joaquin to the Delta absent flood flows since 2010. In addition, the Program is working to complete additional seepage projects in late 2016 to allow for up to 700 cubic feet per second flows in 2017. The Program intends to release the Final Environmental Impact Statement and sign the Record of Decision for the Mendota Pool Bypass and Reach 2B Channel Improvements Project. The Program is also beginning land acquisition actions for the Mendota Pool Bypass component of this project and anticipates buying the lands for the bypass construction. FY 2016 will be the third year of direct spring-run Chinook salmon releases to the San Joaquin River and study efforts for fish actions will continue. FY 2016 will be the first year that the Program will spawn the spring-run Chinook salmon broodstock currently in the Program's Conservation Facility. To work towards implementing the Water Management Goal, the Program intends to complete all actions necessary to recaptures Program flows at the Delta facilities, release the Draft Environmental Impact Statement for the Recapture and Recirculation Plan, complete the Recapture and Recirculation Plan and

complete the Madera Canal Capacity Correction Feasibility Study. In addition, the Program anticipates beginning construction of the Tulare Irrigation District's Cordeniz Groundwater Basin funded by Program funds under Part III of Title X, Subtitle A of P. L. 111-11, the expanded water supply line to the Conservation Facility, the Gravel Pit 46e Isolation Project, and the Madera Canal Low Flow Valve Replacement Project. The construction of the Eastside Bypass Sand Removal Project should also be completed in FY 2016.

California Bay-Delta Restoration Program: SLWRI continues with alternative operation studies, seeking up-front construction cost share partners, and developing cost share agreements with beneficiaries, consistent with the FFR. The NODOS investigation continues in coordination with study partners to develop a new, locally preferred alternative, and to complete the feasibility and environmental studies. The USJRBSI – Reclamation is scheduled to complete the FFR/EIS in February 2016. Investigation continues with alternative operation studies, seeking up-front construction cost share partners, and developing cost share agreements with beneficiaries, consistent with the FFR. The LVE Phase 2 continues with alternative operation studies, planning and designs for new storage and conveyance facilities, and identifying potential beneficiaries. Bay-Delta Water Conservation plans to obligate \$3.5 million with a projected savings of 3,500 af per year. Yolo Bypass Salmonid Habitat Restoration and Fish Passage - Reclamation continues working on planning and environmental compliance process as well as ongoing stakeholder involvement towards implementing the Plan for the Yolo Bypass. California Water Fix - Reclamation anticipates a Final Biological Opinion for California Water Fix and Final Environmental Impact Report (EIR)/EIS and Record of Decision in mid-2016.

Actual Accomplishments in FY 2015 included operating and maintaining facilities achieving a good rating for 22 out of 37 of its high and significant hazard dams, and operating and maintaining facilities achieving a good rating for 8 out of 13 of its reserved works associated facilities. In 2015, the RAX Program funded projects that corrected known deficiencies, improved safety, and replaced equipment that reached its service life. Projects that were substantially completed in FY 2015 include the following: Repayed parking lots at Spring Creek, J.F. Carr, and Trinity Powerplants, modified the louver system at the Tracy Fish Collecting Facility, and repaired the Mechanics Shop Building at the Tracy Fish Collection Facility, Continuing projects include refurbishing butterfly valves at Gianelli Pump/Generating Plant, replacing the 13.8kV breakers at the Tracy Pumping Plant, refurbishing radial gates at Nimbus Dam, replacing the water supply lines at the Nimbus Fish Hatchery, replacing the buss on the main unit transformer at the Keswick Powerplant, modifying the fish screen and the trash rack on Intake #3 at Coleman Fish Hatchery, replacing the Resources Management Building at CCAO, overhauling the fixedwheel gate at Trinity Dam, replacing gears on the radial gates at Delta Cross Channel, replacing the fishtrap brail structure at Keswick Dam, modifying lift stations at New Melones Recreation Area, modifying (converting) the motor speed on Unit #3 at the Gianelli Pump/Generating Plant, replacing two temperature curtains at Whiskeytown Reservoir, replacing station service transformers at Spring Creek, J.F. Carr and Trinity Powerplants, modifying the trash rake monorail structure and replacing the well water system at the Tracy Fish Collecting Facility, replacing UHA switchgear at Folsom Powerplant, replacing governor oil pumps at Shasta Powerplant, and replacing unit excitation systems at Shasta and Keswick Powerplants.

In 2015 planning, engineering, environmental compliance, fishery management, water operations, and public involvement activities continued. The Region continued to support the IEP for the Sacramento-San Joaquin estuary for physical, chemical, and biological monitoring. Undertook activities to address the unprecedented decline in four fish species in the Sacramento-San Joaquin delta including the federally protected delta smelt by assisting in identifying the causes and remedies to the fish decline in the delta. The Region continued water acquisition efforts through multiple agreements and partnerships. Mitigation continued for fisheries impacts associated with operation of the C.W. "Bill" Jones Pumping Plant, including identifying and recommending physical and operational improvements to the Tracy Fish

Collecting as well as assessing present day fishery conditions at the facility, per the CVPIA, and Central Valley Project BiOps (ESA). The Trinity River Restoration Program (TRRP) continued implementation of a December 2000 ROD, including watershed restoration, gravel augmentation, and flow releases with three rehabilitation, five watershed projects and the restoration flow to development of a comprehensive monitoring and adaptive management program for fishery restoration.

Funding for the Klamath Project continued the planning, design, implementation, technical assistance and construction activities to reduce entrainment at Project facilities, where feasible, and/or restore river and lake connectivity to allow fish to effectively migrate above and below Project dams. This activity funded both ESA and non-ESA studies to improve conditions affecting species production, survival, and recovery.

The Lahontan Office completed the rehabilitation of the Prosser Creek Dam gates necessary to implement the TROA; continued procedural, legal and/or negotiation support necessary to implement the TROA; completed cultural work necessary for title transfer of the Humboldt Project; completed the Truckee Canal risk assessment and defined corrective actions; and began implementation of the Resource Management Plan for improved management of associated resources for the Newlands Project. Funds were used to identify Reclamation lands that are no longer necessary for Project purposes and any excess withdrawn lands that should be restored to the public domain.

In the CVP, West San Joaquin Division, San Luis Unit, Reclamation continued to implement actions provided for under the current Court Order and or subsequent Control Schedule if settlement discussions fail. As previously discussed in FY 2017 planned accomplishments, on September 15, 2015, Reclamation and Westlands signed a drainage Settlement Agreement which would require the enactment of federal authorizing legislation before the Settlement Agreement could be implemented. Following execution of the Settlement Agreement, on October 26, 2015 the Court granted a joint motion filed in conjunction with Westlands staying Reclamation's compliance with orders requiring Reclamation to provide drainage service within Westlands until January 15, 2017. The requirement for filing six month status reports was upheld and remains an on-going bi-annual requirement.

Reclamation continued its environmental monitoring and regulatory requirements in support of the Grassland Bypass Project ("GBP"), which uses a segment of the San Luis Drain to remove agricultural drainage from the Grassland Drainage Area under Waste Discharge Requirements ("WDR") established by the Regional Water Quality Control Board. On July 31, 2015, the Regional Water Quality Control Board issued two new WDR's for the GBP to regulate discharges to groundwater in the Grasslands Drainage Area. The Interagency Data Collection and Review Team ("DCRT") continued to conduct the GBP environmental monitoring program to measure selenium and salts in the San Luis Drain, Mud Slough (north), Salt Slough, and the lower San Joaquin River to confirm that monthly load values specified in the Third Use Agreement continue to be met. There have been no discharges of agricultural drainwater from the San Luis Drain to Mud Slough (north) since mid-April 2015. This is partly due to the ongoing drought, but is mainly the result of efforts by Grassland Area Farmers to reduce the volume of their agricultural drainwater.

Remanded Biological Opinions on the Coordinated Long-Term Operation of the CVP and SWP Project EIS – Reclamation submitted the Draft EIS for public review on July 31, 2015 and the public comment period closed October 30, 2015.

The CVP Restoration fund supported activities that managed water releases for fisheries below CVP facilities, delivered refuge water supplies, and maintained long-term monitoring and analysis programs. A report on Accomplishments was developed for transmittal to Congress pursuant to the CVPIA to

highlights releasing an implementation plan for fish provisions and establishing a Science Integration Team with broad Stakeholder participation, channel and floodplain restoration on Central Valley tributaries, development of passage facilities on Northern California tributaries with ESA fish habitat, spawning and rearing habitat downstream of CVP facilities (including increased action on the Upper Sacramento River), completely funding the Woodland/Davis Reclamation District 2035 fish screen, improvements to water operations models, acquisition of additional water supplies for refuges including several long-term groundwater reimbursement agreements, and investments into water recycling for long-term refuge water supplies. The CVP Restoration Fund continued support for the San Joaquin River and Trinity River Restoration Programs. The CVP Restoration Fund acquired and restored land under the Habitat Restoration Program to address impacts as a result of converting habitat to agricultural lands.

The San Joaquin River Restoration Program Office completed development of the Revised Framework for Implementation, a realistic schedule and budget for the Program in July 2015. Although no flows were allocated to the Program in FY 2015, the Program continued efforts to address groundwater seepage impacts that may result from Program flows in the future. To this end, the Program acquired a seepage easement on over 4,500 acres and acquired about 400 acres in fee title from a willing landowner. Collectively this addresses about 20% of the potentially impacted area for groundwater seepage. The Program obtained flowage easements to allow for Program flows over private property in the Eastside Bypass. The Program also released the Draft Environmental Impact Statement for the Mendota Pool Bypass and Reach 2B Channel Improvements Project. FY 2015 was the second year of direct spring-run Chinook salmon releases to the San Joaquin River and study efforts for fish actions continued. Land acquisition will begin for the Mendota Pool Bypass and Reach 2B Channel Improvements Project in preparation for construction. In addition, the Program completed the Investment Strategy for Water Management Goal actions, helping Reclamation and local districts make informed decisions on how to improve water supply reliability and availability within the Friant Division. The Program also settled the Wolfsen v. US litigation in FY 2015.

California Bay-Delta Restoration Program: SLWRI - Reclamation completed the FFR/EIS forwarded to Congress by the Secretary of the Interior in July 2015. NODOS – Reclamation entered into a cost share agreement with the Sites Joint Powers Authority (JPA) to refine feasibility-level designs and cost estimates, developing a locally preferred alternative, and completing environmental documentation. The JPA anticipated receiving construction funding from the State of California Prop 1, Water Quality, Supply and Infrastructure Improvement Act of 2014. USJRBSI – The fish benefits have been reanalyzed using a least-cost, single purpose alternative, and the application of the model to identify fish benefits has been peer-reviewed. The FFR/EIS have been delayed until March 2016. Specific activities include public and stakeholder involvement, responding to comments received on the Draft EIS; identifying mitigation requirements; feasibility level engineering designs and cost estimates; and economic evaluation of potential cost and benefits and financial analysis. LVE Phase 2 - Reclamation developed a cost share agreement with Contra Costa Water District for continued feasibility studies for reservoir expansion to 275 thousand acre-feet, plus oversight and review of activities under existing contracts to reformulate and refine an array of preliminary alternative plans, and analyze their potential effects, benefits, and costs. Bay-Delta Water Conservation Program obligated \$3.0 million with a projected savings of 11,575 acre-feet per year. Yolo Bypass Salmonid Habitat Restoration and Fish Passage -Reclamation continued working on planning and environmental compliance process as well as ongoing stakeholder involvement towards implementing the Plan for the Yolo Bypass. California Water Fix -Reclamation continued to work on the Biological Assessment for California Water Fix and is currently reviewing over 30,000 comments on the Draft Recirculated EIR/Supplemental EIS.

Cachuma Project

LOCATION: The Cachuma Project (Project) is located along the Pacific coast, in southern California, near Santa Barbara.

DESCRIPTION/JUSTIFICATION: The Project facilities consist of five storage dams and reservoirs (Bradbury, Glen Anne, Lauro, Ortega, and Carpenteria), two tunnels (Tecolote and Sheffield) totaling 7.5 miles, 24.3 miles of conduit, and various distribution systems. Bradbury Dam and Reservoir is operated and maintained by Reclamation. The project includes support for endangered Southern California Steelhead (O.Mykiss) in Hilton Creek, downstream of Bradbury Dam. Operation and maintenance of all other project facilities are performed by the water users. The Project provides supplemental irrigation water to approximately 38,000 acres and a supply of municipal water to the City of Santa Barbara and other urban areas located in Santa Barbara County on the southern slope of the Santa Ynez Mountains. Project facilities also are operated to provide recreation benefits.

AUTHORIZATION: P.L. 76-260, Reclamation Project Act of 1939, August 4, 1939 (approved by the Secretary of the Interior on March 4, 1948).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

1 Togram T manetar Data		
Activity	FY 2016	FY 2017
	Enacted	President's Budget
Water and Energy Management and Development	\$295,000	\$295,000
Land Management and Development	301,000	301,000
Fish and Wildlife Management and Development	51,000	51,000
Facility Operations	635,000	635,000
Facility Maintenance and Rehabilitation	39,000	39,000
Enacted/Request	\$1,321,000	\$1,321,000
Non-Federal	0	0
Prior Year Funds	541,483	0
Total Program	\$1,862,483	\$1,321,000
Prior Year Funds/Non-Federal	(541,483)	0
Total Reclamation Allotment	\$1,321,000	\$1,321,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues the efficient use of water through technical assistance, demonstration projects, grants, cooperative agreements, partnerships, and irrigation efficiency improvements while maintaining the National Environmental Policy Act (NEPA) compliance for Project activities in adherence with federally-mandated requirements. Continues the administration and negotiation of water service contract renewals and water marketing activities. \$295,000

Land Management and Development - Continues day-to-day land management activities, complying with and administering resource management plans, laws and regulations, and providing on-site assessment, review, and oversight; and provides NEPA and Endangered Species Act compliance in association with public requests to use or alter recreational lands and facilities. Also continues hazardous materials activities, which may include waste removal and cleanup.

301,000

Fish and Wildlife Management and Development - Continues environmental monitoring of the effect that activities have on the threatened and endangered species which are located on, in, or around project facilities, in compliance with Federal and State environmental laws and regulations. Also continues compliance activities associated with operation and maintenance and other site specific Federal actions.

51,000

Facility Operations - Continues day-to-day operation of Bradbury Dam to ensure continued delivery of water for irrigation, municipal, and industrial uses through tunnels, canals, pumping plants, and pipelines, water releases for water rights downstream, and emergency management activities.

635,000

Facility Maintenance and Rehabilitation - Continues inspections and facility modifications to meet Federal accessibility standards.

39,000

Reclamation Request \$1,321,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Status of NEPA Compliance

CVP, American River Division Folsom Dam Unit

LOCATION: The American River Division (Division) is located in the east-central part of the Sacramento-San Joaquin Valley in El Dorado, Placer, Sacramento, and San Joaquin Counties, California.

DESCRIPTION/JUSTIFICATION: The Division consists of Folsom Dam and Folsom Lake, which were constructed by the U.S. Army Corps of Engineers and transferred to Reclamation in 1956. It has a height of 340 feet, a crest length of 1,400 feet, a capacity of 977,000 acre-feet, and is flanked by long earthfill wing dams extending from the end of the concrete section on both abutments. The Division also includes: Folsom Powerplant, which has a capacity of 212,220 kilowatts and is located at the foot of Folsom Dam on the north side of the river; Mormon Island Auxiliary Dam, a component of the Folsom Dam and Lake facilities; Nimbus Fish Hatchery, built by Reclamation and operated by the State of California with funds provided yearly by Reclamation that is located about 0.3 mile below Nimbus Dam on the American River seven miles below Folsom Dam; and Nimbus Powerplant, which has two generators each with a capacity of 7,763 kilowatts. The El Dorado System was transferred in title to the El Dorado Irrigation District several years ago.

Folsom Dam was originally authorized in the Flood Control Act of 1944 as a 355,000 acre-feet flood control unit. The reauthorization under the American River Division Authorization Act of 1949 changed the dam to a 1,000,000 acre-feet multipurpose facility with a 162,000 kilowatt powerplant. Folsom Dam provides 500,000 acre-feet of water for irrigation, municipal and industrial uses, recreation, public health and safety needs. Folsom Dam and reservoir is a major water management facility located within a large metropolitan area. With a capacity of 976,000 acre-feet, the Folsom reservoir catches runoff from the extensive American River watershed and provides the key flood control structures protecting the Sacramento metropolitan area. Folsom Lake has the highest number of visitor days per year of any recreation area operated by the California Dept of Parks and Recreation, and annual visitation to Folsom facilities averages 2.1 million visitors. The American River Watershed drainage basin covers about 2,100 square miles, northeast of Sacramento, and includes portions of Placer, El Dorado, and Sacramento Counties. Runoff from this basin flows through Folsom Reservoir into the lower American River and through the Sacramento metropolitan area within a system of levees along both banks. Folsom Dam is located at the confluence of the North and South Forks of the American River, approximately 29 miles upstream from the city of Sacramento. The population in the Sacramento Region consists of over 2 million people; failure of one or several features at the Folsom Facility would place a population of more than 710,000 at risk, with an expected life loss up to 5,800 individuals, and property damage in excess of \$70 billion. The Folsom Dam Unit 10-year (FY2005-FY2014) average gross power generation was 466,571,000 kWh.

AUTHORIZATION: P.L. 79-732, Fish and Wildlife Coordination Act, August 14,1946; P.L. 81-356, American River Basin Development, October 14, 1949; P.L. 102-377, FY 1993 Energy and Water Development Appropriation Act, Section 201, October 2, 1992; P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992; P.L. 105-295, October 27, 1998, authorization to construct Folsom Dam temperature control devices as amedned; P.L. 106-377, authorized title transfer of the Sly Park Unit to El Dorado Irrigation District, October 27, 2000; and P.L. 106-53, Title I, Section 101(a)(6)(A), August 17, 1999, authorized the U.S. Army Corps of Engineers to make modifications to the outlets of Folsom Dam.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
·	Enacted	President's Budget
Water and Energy Management and Development	\$1,266,000	\$1,266,000
Land Management and Development	311,000	311,000
Facility Operations	9,138,000	8,888,000
Enacted/Request	\$10,715,000	\$10,465,000
Non-Federal	5,718,000	6,124,000
Prior Year Funds	344,197	0
Total Program	\$16,777,197	\$16,589,000
Prior Year Funds/Non-Federal	(6,062,197)	(6,124,000)
Total Reclamation Allotment	\$10,715,000	\$10,465,000

Total Cost Information*

	Total Estimated	Total to			Balance to
	Cost	09/30/15	FY 2016	FY 2017	Complete
Reclamation	\$176,794,428	\$176,794,428	\$0	\$0	\$0
Adjustments 1/	79,688	79,688	0	0	0
Total	\$176,874,116	\$176,874,116	\$0	\$0	\$0

^{*} Includes costs associated with the authorized appropriation ceiling. FY 2017 will be the last year total cost information will be provided as construction activities are complete at this time. ¹/ Includes Federal net property transfers of \$79,688.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation	\$18,127,000	\$18,719,000
Power	5,299,000	4,612,000
Municipal & Industrial Water	1,733,000	1,775,000
Flood Control	1,212,000	1,247,000
Navigation	87,000	90,000
Safety of Dams ^{1/}	143,183,000	143,183,000
Safety, Security, Law Enforcement	7,248,000	7,248,000
Total ^{2/}	\$176,889,000	\$176,874,000

^{1/} Includes safety of dams program activities at the Folsom Dam, Mormon Island Auxiliary Dam; under Reclamation Safety of Dams Act of 1978, November 2, 1978 (P.L. 95-578), as amended by P.L. 98-404, Reclamation Safety of Dams Act Amendments of 1984, August 28, 1984.

METHODOLOGY: The operational and financial integration provision of the CVP authorization

²/ Rounding adjustment of -\$116 made for allocation purposes.

requires that cost allocation, rate setting, and repayment studies be performed for the total project rather than individual divisions and units. In response to congressional requests for information on individual divisions and units, pro rata shares of the cost allocation for the total authorized project is shown for the individual divisions and units. Thus, the pro rata share of the project cost allocation shown for this division will change each time there is a change in the total estimated cost of the authorized CVP.

The net decrease of \$15,000 is due to the elimination of out-year cost estimates for the Folsom Dam Temperature Control Device.

APPROPRIATION CEILING: Not applicable for the Division, except for the construction of temperature control devices on existing non-Federal facilities which were authorized by P.L. 105-295, October 27, 1998, as amended by P.L. 108-137, Title II, Section 219, December 1, 2003, and P.L. 108-361, Title II, Section 203, October 25, 2004. The ceiling for the temperature control device on existing non-Federal facilities is \$14,888,000 (October 2016) and the comparable Federal obligation is \$5,896,000 which does not exceed the ceiling limitation.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues administration of water rights and water marketing activities, such as administering water contracts, agreements, developing standards, National Environmental Policy Act compliance, operations support, water forum participation, groundwater monitoring activities, and water resources management plans. Continues environmental monitoring, State law coordination and compliance. \$1,266,000

Land Management and Development - Continues concession management activities at Folsom, resource management, and hazardous materials management activities and programs at Folsom Lake and Lake Natoma.

311,000

Facility Operations -

Water/Power Operations - Continues day-to-day operation, outreach programs, maintenance and efficient resource management of the Folsom and Nimbus dams, reservoirs, powerplants, switchyards, pumping plant, and recreation facilities. CVP Preference Power Customers are funding Folsom and Nimbus powerplants and switchyards in FY 2017.

CVP Power Customers (non-Federal)

11,082,000

(6,124,000)

4,958,000

<u>Fish and Wildlife Facilities</u> - Continues operation of the Nimbus fish protection facility and hatchery. 2,500,000

Folsom Security - Continues operation and maintenance of installed hardened security features for the Folsom Dam complex. 615,000

<u>Public Safety, Emergency Services, Fire Suppression and Prevention</u> - Continues Reclamation's costshare under a Managing Partner Agreement with the California Department of Parks and Recreation for law enforcement, visitor management, emergency response, and other public safety requirements relating to more than 2 million recreation visitors annually to Folsom Dam and Reservoir. In addition, funds presuppression fire activities by CalFire, Youth Corps, and other agencies; and fire response on project lands surrounding Folsom Reservoir and Lake Natoma.

Subtotal, Facility Operations

8,888,000

Reclamation Request

\$10,465,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Land Certification

Obligations by Function for Operating Projects

Project Repayment FY 2017 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Summary of Irrigation Investment

Note: Folsom Unit, Folsom Dam is currently undergoing a safety of dams modification – see the Dam Safety Program listed under the Bureauwide Programs.

CVP, Auburn-Folsom South Unit

LOCATION: The Auburn-Folsom South Unit (Unit) is located in the east-central part of the Sacramento-San Joaquin Valley in El Dorado, Placer, Sacramento, and San Joaquin counties, California.

DESCRIPTION/JUSTIFICATION: This Unit consists of the authorized, but unconstructed Auburn Dam, Reservoir, and Powerplant; the Folsom South Canal, a proposed 68.8-mile long canal (26.7 miles have been completed) with an anticipated capacity of 3,500 cubic feet per second, originating at Nimbus Dam on the American River which would extend southward through San Joaquin County and terminate 20 miles southeast of the City of Stockton; County Line Dam and Reservoir, a proposed earthfill structure 90 feet high and 585 feet long with a capacity of 40,000 acre-feet would develop water and power supplies for delivery to users located in the Unit service area and elsewhere in the project service area when complete. The Unit would provide full irrigation service to 28,300 acres, supplemental irrigation service to 416,050 acres, and 332,000 acre-feet annually for municipal and industrial use. Benefits would also accrue to fish and wildlife, recreation, and water quality. The power installation at Auburn would have an initial capacity of 300,000 kilowatts, consisting of two units of 150,000 kilowatts each, with provisions for ultimate development of the hydroelectric capacity, now estimated to consist of an additional two units of 150,000 kilowatts each. The installation of the ultimate capacity would require additional authorization. The Federal Government owns approximately 26,000 acres of land for the project used by approximately 1.5 million visitors annually.

In December 2006, Reclamation completed a final draft of the Auburn-Folsom South Unit (AFSU) Special Report, Benefits and Cost Update, Central Valley Project, California. The Special Report was completed in accordance with P.L. 109-103 and was finalized and transmitted to Congress in January 2007. The 1963 Feasibility Report and subsequent authorization for the Auburn-Folsom South Unit was based upon existing and reasonable foreseeable future conditions as known or assumed in the 1950s. The Special Report indicates that a reformulation of the authorized project that reviews the current and projected future conditions would provide a more accurate assessment of the feasibility of the AFSU today. This would include a review to determine required features to accomplish project purposes under current and projected future conditions, optimize the size and use of those features, modify or develop designs to current standards, and reallocate benefits and costs. On December 2, 2008, the California State Water Resources Control Board revoked four water right permits held by Reclamation for the Auburn Dam Project.

AUTHORIZATION: P.L. 89-161, Auburn-Folsom South Unit, Central Valley Project, September 2, 1965. P.L. 106-566 authorized title transfer of the Foresthill Divide subunit to Foresthill Public Utility District. The AFSU Report was authorized by P.L. 109-103, Energy and Water Appropriations Act FY 2006, November 19, 2005.

COMPLETION DATA: Water is available from the first 27 miles of the Folsom South Canal. In addition, Sugar Pine Dam and Foresthill conveyance system have been completed. Construction of Auburn Dam has been indefinitely deferred. Future development will require new legislation.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century.

Performance Measure: Percent of water infrastructure in good condition as measured by the Facilities

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Land Management and Development	\$35,000	\$35,000
Facility Operations	2,184,000	2,056,000
Enacted/Request	\$2,219,000	\$2,091,000
Prior Year Funds	8,976	0
Total Program	\$2,227,976	\$2,091,000
Prior Year Funds	(8,976)	0
Total Reclamation Allotment	\$2,219,000	\$2,091,000

Total Cost Information*

	Total Estimated	Total to			Balance to
	Cost	9/30/15	FY 2016	FY 2017	Complete
Reclamation	\$3,955,790,961	\$456,242,803	0	0	\$3,499,548,158
Adjustments 1/	26,277,308	26,277,308	0	0	0
Total	\$3,982,068,269	\$482,520,111	0	0	\$3,499,548,158

Includes costs associated with the authorized appropriation ceiling. Due to construction being deferred, this table will no longer be included in future submissions. Any future development will require legislation.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation	\$2,279,292,000	\$2,334,284,000
Power	666,309,000	575,043,000
Municipal and Industrial Water	217,868,000	221,284,000
Recreation	19,058,000	19,058,000
Fish and Wildlife	561,825,000	591,385,000
Flood Control	152,429,000	155,524,000
Navigation	10,965,000	11,170,000
Deferred Use	2,425,000	2,425,000
American River Pump Station	71,895,000	71,895,000
Total 1/	\$3,982,066,000	\$3,982,068,000

¹⁷Rounding adjustment of -\$269 made for allocation purposes. The American River Pump Station line item is presented as its own line in the cost allocation table because those costs were deemed non-reimbursable by P.L. 110-229, Section 503b, dated May 2, 2008.

METHODOLOGY: The operational and financial integration provision of the Central Valley Project

¹/ Includes contributions of \$25,656,665 from the Placer County Water Agency (PCWA) and Sacramento Metropolitan Water Authority and Federal net property transfers; and \$620,643 in total consolidated other expenditures and credits.

(CVP) authorization requires that the cost allocation, ratesetting, and repayment studies be performed for the total project rather than individual divisions and units. In response to congressional requests for information on individual divisions and units, pro rata shares of the cost allocation for the total authorized project are shown for the individual divisions and units. Thus, the pro rata share of the project cost allocation shown for this unit will change each time there is a change in the total estimated cost of the authorized CVP.

APPROPRIATION CEILING: Appropriations authorized are \$2,783,809,000 (October 2016). The comparable Federal obligation is \$3,955,790,961 which exceeds the appropriation ceiling by more than the amount of contingencies included in the obligation. Any future project development under this authorization will require an increase in the ceiling, therefore no future ceiling updates will be reported until further legislation is enacted.

WORK PROPOSED FOR FY 2017:

Land Management and Development -

<u>Hazardous Waste Management</u> - Continues water quality investigations and compliance with Federal, State, and local hazardous waste laws and regulations. \$35,000

Facility Operations - Continues funding Reclamation's cost-share under a Managing Partner Agreement with California State Department of Parks and Recreation for law enforcement, visitor management, emergency response, and other public safety requirements relating to approximately 1.5 million recreation visitors annually to Auburn Project Lands. In addition, funds pre-suppression fire activities by California State Department of Parks and Recreation, Youth Corps, and other agencies and fire response on project lands.

2,056,000

Reclamation Request \$2,091,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Land Certification

Project Repayment FY 2017 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Summary of Irrigation Investment

CVP, Delta Division

LOCATION: The Delta Division (Division) is located in Alameda, Contra Costa, Fresno, Merced, Sacramento, San Joaquin, and Stanislaus counties in central California.

DESCRIPTION/JUSTIFICATION: This Division includes the Delta Cross Channel, an earth section channel designed to divert approximately 3,500 cubic feet per second; Contra Costa Canal, 47.7 miles long with an initial diversion capacity of 350 cubic feet per second; the Rock Slough Fish Screen at the head of the Contra Costa Canal intake channel; C.W. "Bill" Jones Pumping Plant (Jones Pumping Plant), consisting of an inlet channel, pumping plant, discharge pipes, and 6 pumping units each at 900 cubic feet per second and each with a rating of 22,500 horsepower; the Delta-Mendota Canal, 115.7 miles long with a diversion capacity of 4,600 cubic feet per second; the Delta-Mendota Canal/California Aqueduct Intertie, a 450 cubic feet per second pumping plant and pipeline between the state and Federal projects; Tracy Fish Collecting Facility, located at the head of the Jones Pumping Plant intake channel; and 21 salinity sites located throughout the Delta, all constructed by Reclamation. The Division provides full irrigation service to 45,648 acres, supplemental irrigation service to 181,582 acres, and 100,104 acre-feet annually for municipal and industrial use in the Division service area.

The Division provides delivery of water and power supplies developed in the American River, Shasta, and Trinity River divisions to the areas served by the Delta Division, San Luis Unit, and San Felipe Division. This Division also provides fish and wildlife benefits, flood control, and navigation.

AUTHORIZATION: P.L. 74-442, Emergency Relief Appropriation Act of 1935, April 8, 1935. The project was authorized by a finding of feasibility by the Secretary of the Interior, and approved by the President on December 2, 1935; P.L. 75-392, Rivers and Harbors Act of 1937, August 26, 1937; P.L. 76-868, Rivers and Harbors Act of 1940, October 27, 1940; P.L. 99-546, Coordinated Operations Agreement, Suisun Marsh Preservation Agreement and Small Reclamation Projects Act of 1956, as amended; and P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

COMPLETION DATA: Completed and operational major features include: Jones Pumping Plant and Switchyard, Delta Cross Channel, Delta-Mendota Canal, Tracy Fish Collecting Facility, and the Contra Costa Canal System. This is an ongoing project that operates and maintains the facilities of the Division.

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SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
	Enacted	President's Budget
Water and Energy Management and		
Development	\$2,781,000	\$2,631,000
Land Management and Development	201,000	201,000
Fish and Wildlife Management and Development	2,736,000	2,636,000
Facility Operations	5,477,000	5,477,000
Facility Maintenance and Rehabilitation	34,000	34,000
Enacted/Request	\$11,229,000	\$10,979,000
Prior Year Funds	16,500	0
Total Program	\$11,245,500	\$10,979,000
Prior Year Funds	(16,500)	0
Total Reclamation Allotment	\$11,229,000	\$10,979,000

Total Cost Information*

	Total Estimated Cost 1/	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation 2/	\$216,350,702	\$201,290,703	\$0	\$0	\$15,059,999
Adjustments ²⁷ Total	3,597,601 \$219,948,303	3,597,601 \$204,888,304	\$0	\$0	\$15,059,999

^{*}This is the final year total cost information will be reported. Construction activity is substantially complete.

Cost Allocation and Methodology

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Allocation	FY 2016	FY 2017
Irrigation	\$162,234,000	\$143,116,000
Power	47,426,000	35,256,000
Municipal and Industrial Water	15,507,000	13,567,000
Fish and Wildlife	17,787,000	17,787,000
Flood Control	10,849,000	9,535,000
Navigation	780,000	685,000
Total ^{1/}	\$254,583,000	\$219,946,000

¹/Rounding adjustment of -\$2,303 made for allocation purposes.

METHODOLOGY: The operational and financial integration provision of the Central Valley Project (CVP) authorization requires that cost allocation, ratesetting, and repayment studies be performed for the total project rather than individual divisions and units. In response to congressional requests for information on individual divisions and units, pro rata shares of the cost allocation for the total authorized project are shown for the individual divisions and units. Thus, the pro rata share of the project cost allocation shown for this division will change each time there is a change in the total estimated cost of the authorized CVP. The net decrease in the total cost to be allocated is due to the elimination of out-year cost estimates for the operation and maintenance of Suisun Marsh facilities.

¹/ Includes total ARRA funding of \$26,302,286 for Contra Costa Rock Slough Fish Screen and \$21,863,516 for Delta-Mendota Canal/California Aqueduct (DMC/CA) Intertie.

² Includes \$3,597,601 for non-Federal financial participation for the DMC/CA Intertie.

APPROPRIATION CEILING: Not applicable for the Division, except for Suisun Marsh Preservation. Appropriations authorized in P.L. 99-546, October 27, 1986, for Suisun Marsh Preservation are 40 percent of actual operation and maintenance costs.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

Interagency Ecological Program (IEP) Delta Support - Continues to support the IEP for the Sacramento-San Joaquin Delta and San Francisco Bay estuary. This program maintains a network of continuous and discrete monitoring stations that sample physical, chemical, and biological properties of the ecosystem including water quality, nutrients, phytoplankton, zooplankton and indices of the relative abundance of fish populations. Monitored fish populations include species listed as threatened or endangered under the Endangered Species Act: winter-run Chinook salmon, late-fall-run Chinook salmon, Central Valley steelhead trout, delta smelt, green sturgeon, and longfin smelt. This monitoring is required under the joint Federal-State water export permit and by the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions governing long-term operation of the CVP/State Water Project (SWP). The resulting data are used to guide CVP/SWP operations and to address scientific questions of management interest. 1,188,000

<u>Suisun Marsh Preservation</u> - Continues Federal participation with the State of California to identify structural and non-structural actions for protection, and preservation of Suisun Marsh to improve water quality, while preserving the storage yield of the CVP.

51,000

<u>Delta-Mendota Canal (DMC) Regulatory Actions</u> - Continues to ensure regulatory compliance with the Total Maximum Daily Loads (TMDL) for salts, boron, and selenium; and help fulfill the requirements of the Management Agency Agreement with the Central Valley Regional Water Quality Control Board. Evaluate and address emerging water quality issues pertaining to the DMC and adjacent areas.

145,000

National Environmental Policy Act (NEPA) Compliance - Continues analysis and documentation of potential direct, indirect, and cumulative impacts resulting from Federal actions in accordance with NEPA.

128,000

DMC Water Quality Monitoring/Water Measurement Quality Assurance/Groundwater Monitoring and Reports - Continues measurement of selenium and salinity in the DMC and Mendota Pool required for compliance with TMDL and biological opinions, as well as monitoring the groundwater levels and oversight of water measurement activities by water users. These tasks include sample collection, lab analysis, field monitoring statistical evaluation, mathematical models, and program administration.

522,000

<u>Hydrologic and Operational Modeling</u> - Continues evaluation of linkages between CALSIM/Diffusion Evolution (operational models) and HydroGeoSphere (simulation model). Construct CVHGSM (water flow and solute/thermal transport) for Central Valley. 32,000

<u>DMC Subsidence</u> - Continues evaluation of location and anticipated amount of land subsidence in the Federal areas of the San Joaquin Valley and assess potential risks.

5,000

<u>Delta Division Contract Renewals Groundwater</u> - Continues groundwater and surface water model activities keeping current with changes occurring in the San Joaquin Valley. 26,000

<u>Water Marketing/Contracting</u> - Continues the administration and negotiation of water related contracts and related activities for contract compliance, repayment, and water marketing activities.

524,000

<u>Aquatic Weed Research</u> - Continues support of the aquatic weed research program to include biological control agents, herbicide efficacy, growth, and reproduction of weeds. 10,000

Subtotal, Water and Energy Management and Development

\$2,631,000

Land Management and Development -

<u>Land Use Compliance/Land Resource Protection</u> - Continues day-to-day land management activities, complying with and administering laws and regulations, execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; and provide NEPA and ESA compliance in association with public requests to use or alter recreation lands and facilities.

162,000

<u>Geographic Information System (GIS) Mapping</u> - Continues development of GIS mapping and databases to provide current mapping of Reclamation lands and facilities within the Division.

39,000

Subtotal, Land Management and Development

201,000

Fish and Wildlife Management and Development -

<u>Tracy</u> (Jones) <u>Pumping Plant Mitigation Program</u> - Continues mitigation for fishery impacts associated with operation of the Jones Pumping Plant, including but not limited to identifying and recommending physical and operational improvements to the Tracy Fish Collecting Facility, as well as assessing fishery conditions at the facility, per Central Valley Project Improvement Act, Section 3406(b)(4), and Central Valley Project Operating Criteria and Plan Biological Opinions (ESA). 1,186,000

ESA Compliance - Continues the implementation of the Biological Opinion activities to ensure Reclamation's compliance with a number of consultations with the U.S. Fish and Wildlife Service under Section 7 of the ESA of 1973, which includes long-term water service contract renewals located within the Division.

206,000

<u>Contra Costa/Environmental Monitoring</u> - Continues monitoring pest management activities on, in, or around the DMC for compliance with Federal and State environmental laws and regulations. Continues monitoring efforts for endangered species at the intake to the Contra Costa Canal as directed by the Delta smelt, winter-run Chinook salmon, and Los Vaqueros Biological Opinions.

41,000

<u>Suisun Marsh Preservation (Fish and Wildlife Protection and Preservation)</u> - Continues Reclamation participation with California Department of Water Resources to ensure a dependable water supply of adequate quantity and quality to protect wildlife habitat in the Marsh for the protection and preservation of fish and wildlife in accordance with P.L. 99-546, State Water Resources Control Board Decision 1641, and the Revised Suisun Marsh Preservation Agreement. 1,203,000

Subtotal, Fish and Wildlife Management and Development

2,636,000

Facility Operations -

<u>Tracy Fish Collecting Facility</u> - Continues operation and preventive maintenance of the Tracy Fish Collecting Facility and associated fish release sites that screen, collect, and return fish (including threatened and endangered species) to the Delta out of the sphere of influence of the Jones Pumping Plant. 5.084.000

<u>Miscellaneous Operation and Maintenance Activities</u> - Continues day-to-day operation of the Delta Cross Channel and the water quality monitoring stations to meet water quality standards in the Delta, prevent flooding on the east side of the Delta, protect migrating fish in the Delta, support the aquatic weed research and eradication programs, and perform emergency management activities.

393,000

Subtotal, Facility Operations

5,477,000

Facility Maintenance and Rehabilitation - Continues operation and maintenance inspections, and facility modifications to meet Federal accessibility standards.

34,000

Reclamation Request \$10,979,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Land Certification

Obligations by Function for Operating Projects

Project Repayment FY 2017 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Summary of Irrigation Investment

CVP, East Side Division

LOCATION: The East Side Division (Division) is located in Alpine, Calaveras, San Joaquin, Stanislaus, and Tuolumne counties, California.

DESCRIPTION/JUSTIFICATION: This Division includes New Melones Dam, Lake, and Powerplant located on the Stanislaus River. New Melones Dam is an earth and rockfill structure, 625 feet above streambed and has a crest length of 1,560 feet. New Melones Lake has a capacity of 2.4 million acre-feet, a water surface area of 12,500 acres, and contains 100 miles of shoreline. The 2-unit powerplant has an installed capacity of 300 megawatts and produces approximately 455 million kilowatt-hours of energy annually. The multipurpose functions of this project include flood control, irrigation, municipal and industrial water supply, power generation, fishery enhancement, water quality improvement, and recreation. Irrigation and storage facilities have been developed on the Stanislaus River both upstream and downstream of New Melones Dam.

AUTHORIZATION: Emergency Relief Appropriation Act of 1935, April 8, 1935. The project was authorized by a finding of feasibility by the Secretary of the Interior, and approved by the President on December 2, 1935; P.L. 75-392, Rivers and Harbors Act of 1937, August 26, 1937; P.L. 76-868, Rivers and Harbors Act of 1940, October 17, 1940; P.L. 78-534, Flood Control Act, December 22, 1944; P.L. 87-874, Rivers and Harbors Act of 1962; P.L. 87-874, Flood Control Act of 1962, October 23, 1962; P.L. 99-546, Coordinated Operations Agreement, Suisun Marsh Preservation Agreement, and Small Reclamation Projects Act of 1986, October 27, 1986; P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992; P.L. 108-361, Water Supply, Reliability, and Environmental Improvement Act, October 25, 2004; and P.L. 108-447, Title VIII, Federal Lands Recreation Enhancement Act, December 8, 2004.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
	Enacted	President's Budget
Water and Energy Management and Development	\$783,000	\$783,000
Land Management and Development	507,000	507,000
Facility Operations	2,672,000	2,544,000
Facility Maintenance and Rehabilitation	100,000	100,000
Enacted/Request	\$4,062,000	\$3,934,000
Non-Federal	2,000,000	2,100,000
Prior Year Funds	19,082	0
Total Program	\$6,081,082	\$6,034,000
Prior Year Funds/Non-Federal	(2,019,082)	(2,100,000)
Total Reclamation Allotment	\$4,062,000	\$3,934,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

<u>Administration and Compliance</u> - Continues administration of water rights and water marketing activities, energy conservation and environmental programming, and National Environmental Policy Act compliance.

423,000

<u>Tri-Dams Management</u> - Continues funding to the Tri-Dams Authority to operate and manage its system to allow delivery of water.

98,000

New Melones Revised Plan of Operations - Continues fishery studies aimed at providing the biological information needed to develop an instream flow schedule that meets water quality and fishery flow objectives.

262,000

Subtotal, Water and Energy Management and Development

\$783,000

Land Management and Development - Continues management and concession oversight of the recreation area at New Melones. Continues compliance with hazardous materials handling and clean-up as required by Federal and State laws, technical support of maintenance and development of project lands, realty actions, trespass recreation fee assessments, structures inventory, and fire prevention activities.

507,000

Facility Operations -

<u>Land and Recreation Facilities</u> - Continues vegetation management, operation of public use areas, and implementation of a prescribed fire plan in order to protect and enhance resource values, eliminate fire hazards, and ensure public health and safety of the visiting public. 2,388,000

<u>Power and Water Operations</u> - Continues ongoing infrastructure support, preventive maintenance, service contract renewals, and effective and efficient resource management of the New Melones Dam, Reservoir, and Powerplant. Central Valley Project Preference Power Customers are funding the New Melones Powerplant in FY 2017.

2,256,000

Central Valley Project Power Customers (non-Federal)

(2,100,000) 156,000

Subtotal, Facility Operations

Reclamation Request

2,544,000

Facility Maintenance and Rehabilitation - Continues facility modifications to meet Federal accessibility standards.

100,000

\$3,934,000

SEE APPENDIX FOR: Land Certification

Obligations by Function for Operating Projects Status of Water Service and Repayment Contracts

CVP, Friant Division

LOCATION: The Friant Division is located in Fresno, Kern, Madera, Merced, and Tulare counties, California.

DESCRIPTION/JUSTIFICATION: The main features are Friant Dam, a concrete gravity structure 319 feet high with a crest length of 3,488 feet that regulates the San Joaquin River; Millerton Lake, with a capacity of 520,500 acre-feet; the 151 mile-long Friant-Kern Canal, with an initial capacity of 4,000 cubic feet per second; and the Madera Canal, a 36 mile-long canal with an initial capacity of 1,000 cubic feet per second. Additional related facilities include local water distribution systems, the Mendota Pool, and the Columbia-Mowry distribution system. The Division provides storage for irrigation and transportation of water through the southern part of the semiarid Central Valley. Other benefits include flood control, groundwater recharge, fish and wildlife mitigation, recreation, and municipal and industrial benefits. The Friant Water Users Authority representing 22 districts was formed in 1985 under the State of California's joint exercise of powers law to operate and maintain the Friant-Kern Canal, a conveyance feature of the Central Valley Project (CVP). The new Friant Water Authority assumed operation and maintenance of the Friant-Kern Canal in 2004. The Madera-Chowchilla Water and Power Authority (MCWPA). representing two districts, operates and maintains the Madera Canal, a conveyance feature of the CVP. The MCWPA assumed operation and maintenance of the Madera Canal in 1983. Between September 1985 and February 1998, operation and maintenance of the Madera Canal was performed jointly by Madera Irrigation District and the Chowchilla Water District. Since that time, MCWPA continues to operate and maintain the Madera Canal and associated facilities but without the benefit of an executed agreement.

In FY 2011 through FY 2016, Congress provided funding under the Water and Related Resources Appropriations account within the CVP, Friant Division to support the San Joaquin River Restoration Program (SJRRP). The FY 2017 Budget proposes discretionary funds for the SJRRP in a separate account, the San Joaquin River Restoration Fund.

AUTHORIZATION: Emergency Relief Appropriation Act of 1935, April 8, 1935. The project was authorized by a finding of feasibility by the Secretary of the Interior, and approved by the President on December 2, 1935, for construction by Reclamation; P.L. 75-392, Rivers and Harbors Act of 1937, August 26, 1937; P.L. 76-868, Rivers and Harbors Act of 1940, October 17, 1940; Small Reclamation Projects Act of 1956, as amended; P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992; and P.L. 111-11, Title X, San Joaquin River Restoration Settlement Act of 2009.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
·	Enacted	President's Budget
Water and Energy Management and Development	\$966,000	\$966,000
Land Management and Development	523,000	523,000
Fish and Wildlife Management and Development	703,000	703,000
Facility Operations	3,384,000	3,256,000
Facility Maintenance and Rehabilitation	17,000	17,000
Enacted/Request	\$5,593,000	\$5,465,000
Prior Year Funds	2,405,896	0
Total Program	\$7,998,896	\$5,465,000
Prior Year Funds	(2,405,896)	0
Total Reclamation Allotment	\$5,593,000	\$5,465,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

<u>San Joaquin Valley Land Subsidence</u> - Continues analysis of land subsidence in the Federal areas of the San Joaquin Valley to determine the location and quantity of expected future land subsidence, in order to assess water delivery disruptions, capacity reductions, and facility damage that the land subsidence would cause.

16,000

<u>Miscellaneous Activities</u> - Continues the administration and negotiation of water related contracts and related activities for compliance and water marketing, groundwater monitoring and reporting, and aquatic weed research program.

689,000

National Environmental Policy Act (NEPA) Compliance Activities - Continues analysis and documentation of potential direct, indirect, and cumulative impacts resulting from Federal actions in accordance with NEPA.

261,000

Subtotal, Water and Energy Management and Development

\$966,000

Land Management and Development -

<u>Land Use Compliance</u> - Continues the oversight of land-use requests, review of current and proposed uses of land associated with the Friant-Kern and Madera canals, Millerton Reservoir, Lake Woollmes, and other land activities, and provides NEPA and Endangered Species Act (ESA) compliance in association with public requests to use or alter recreational lands and facilities.

395,000

<u>Land Resource Protection</u> - Continues development and implementation of resource protection plans for fire suppression, waste and hazardous materials management, and soil and moisture conservation to protect public health and safety on Reclamation lands managed for non-operational uses.

88,000

<u>Geographic Information System (GIS) Mapping</u> - Continues development of GIS mapping and databases to provide current mapping of Reclamation lands and facilities. 40,000

Subtotal, Land Management and Development

523,000

Fish and Wildlife Management and Development -

ESA Compliance - Continues Environmental Impact Statement and Biological Opinion activities to ensure Reclamation's compliance with a number of new and existing consultations with the U.S. Fish and Wildlife Service under Section 7 of the ESA, which includes interim and long-term water service contracts, continued operation and maintenance (O&M) of Reclamation facilities, and other site-specific Federal actions.

660,000

Environmental Monitoring - Continues environmental monitoring of the effects that pest management activities have on threatened and endangered species, which are located on, in, or around the Friant Dam and Friant-Kern and Madera canals, in compliance with Federal and State environmental laws and regulations.

43,000

Subtotal, Fish and Wildlife Management and Development

703,000

Facility Operations -

<u>Friant Dam, Millerton Lake, and San Joaquin River Operations</u> - Continues the O&M for Friant Dam, the outlet works for Madera and Friant-Kern canals, and San Joaquin River and associated O&M facilities for the distribution of project water. Continues the San Joaquin River operation, which supplies water for irrigation and domestic purposes to certain lands along the San Joaquin River.

3,030,000

<u>Water Operations</u> - Continues to provide technical engineering service and consultation for design and specifications for modifying, replacing, or repairing features for the operations of Friant Dam, Millerton Lake, San Joaquin River, and the Columbia-Mowry Pumping/Delivery System. Continues the operation of the Columbia-Mowry System and flood control within the San Joaquin Valley. Continues the hydrilla detection and eradication program.

226,000

Subtotal, Facility Operations

3,256,000

Facility Maintenance and Rehabilitation - Continues inspections and facility modifications to meet Federal accessibility standards.

17,000

Reclamation Request

\$5,465,000

SEE APPENDIX FOR: Land Certification

Obligations by Function for Operating Projects

Status of NEPA Compliance

Status of Water Service and Repayment Contracts

CVP, Miscellaneous Project Programs

LOCATION: The Miscellaneous Project Programs (Programs) encompasses the entire Central Valley of California for those activities not reported under a separate division. The boundary extends from the Cascade Range in the north to the plains along the Kern River in the south.

DESCRIPTION/JUSTIFICATION: As an integral component of the Central Valley Project (CVP), the Programs support the efficient delivery of up to 9.5 million acre-feet of water and 4.3 gigawatts of hydropower developed by the CVP to users located throughout California. Additional CVP-wide purposes and benefits supported by the Programs include water marketing, administration and compliance, geographic information systems, water quality, land management, Central Valley Habitat Monitoring Program, operation and maintenance technical support, and facility examinations. The Programs ensure the administration and coordination of actions having a scope extending beyond the jurisdiction of individual CVP units and divisions. Such actions involve, but are not limited to, the setting of CVP-wide policies and actions that have a CVP-wide effect.

AUTHORIZATION: Emergency Relief Appropriation Act of 1935, April 8, 1935. The CVP was authorized by a finding of feasibility by the Secretary of the Interior, and approved by the President on December 2, 1935; P.L.75-392, Rivers and Harbors Act of 1937, August 26, 1937; P.L. 76-868, Rivers and Harbors Act of 1940, October 17, 1940; P.L. 81-356, American River Division Authorization Act, October 14, 1949; P.L. 87-874, River and Harbors Act of 1962 (Flood Control Act), October 23, 1962; P.L. 91-502, Black Butte Integration Act, October 23, 1970; P.L. 94-423, Reclamation Authorization Act of 1976, September 28, 1976; P.L. 99-546, Coordinated Operations Agreement, Suisun Marsh Preservation Agreement, and Small Reclamation Projects Act of 1956, as amended; and P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act (CVPIA) of 1992, October 30, 1992.

COMPLETION DATA: As of September 30, 2015, the CVP, Miscellaneous Project Programs construction projects were 83 percent complete. Major ongoing construction projects include the Refuge Water Facility Construction Program, the Anadromous Fish Restoration Program, and the Anadromous Fish Screen Program. Major features that are completed and operational include Friant Dam and Reservoir, Friant-Kern Canal, Madera Canal, and Friant-Kern and Madera distribution systems.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
	Enacted	President's Budget
Water and Energy Management and Development	\$5,962,000	\$6,955,000
Land Management and Development	1,449,000	1,449,000
Fish and Wildlife Management and Development	185,000	185,000
Facility Operations	274,000	274,000
Facility Maintenance and Rehabilitation	180,000	180,000
Enacted/Request	\$8,050,000	\$9,043,000
Other Federal ^{1/}	31,741,000	46,106,000
Prior Year Funds	28,335	0
Total Program	\$39,819,335	\$55,149,000
Prior Year Funds/Other Federal	(31,769,335)	(46,106,000)
Total Reclamation Allotment	\$8,050,000	\$9,043,000

^{1/} Central Valley Project Restoration Fund

Explanation of Significant Changes in Funding: Increase in Water and Energy Management and Development is due to costs associated with completing the CVP-wide Cost Allocation Study and to implement changes in operations for Water Marketing caused by the ongoing California drought. Additional funding will allow study completion in FY 2017.

Total Cost Information

	Total Estimated	Total to	FY 2016	FY 2017	Balance to
	Cost	9/30/15			Complete
Reclamation	\$1,103,359,790	\$904,900,289	\$26,741,000	\$35,506,000	\$136,212,501
Adjustments 1/	50,370,159	50,370,159	0	0	0
Total ^{2/}	\$1,153,729,949	\$955,270,448	\$26,741,000	\$35,506,000	\$136,212,501

^{1/} Includes \$14,722,205 for Federal net property transfers; \$35,647,954 for cost-share funds from the State of California for various CVPIA programs.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation	\$441,807,000	\$335,806,000
Power	129,154,000	82,724,000
Municipal and Industrial Water	42,231,000	31,833,000
Recreation	54,000	54,000
Fish and Wildlife	509,379,000	679,333,000
Flood Control	29,546,000	22,373,000
Navigation	2,125,000	1,607,000
Total ^{1/}	\$1,154,296,000	\$1,153,730,000

^{1/}Rounding adjustment of +\$51 made for allocation purposes.

²/ Includes CVP Restoration Funds.

METHODOLOGY: The operational and financial integration provision of the CVP authorization requires the cost allocation, rate setting, and repayment studies be performed for the total project rather than individual divisions and units. In response to congressional requests for information on individual divisions and units, pro rata shares of the cost allocation for the total authorized project are shown for the individual divisions and units. Thus, the pro rata share of the project cost allocation shown for these Programs will change each time there is a change in the total estimated cost of the authorized CVP.

APPROPRIATION CEILING: Not applicable.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

Water Marketing - Continues water marketing which includes annual rate setting, cost allocations for water operations record keeping and accounting, negotiation and administration of water service contracts and repayment contracts, water rights litigation, repayment capacity and economic studies, water rights, and water transfer activities. Increase is due to costs associated with completing the CVP-wide Cost Allocation Study and to implement changes in operations for Water Marketing caused by the ongoing drought.

\$5,165,000

Other Technical Support - Provides technical support for National Environmental Policy Act compliance, irrigation and drainage, and evaluation and maintenance of electronic models and economic model maintenance. Requested increase due to growing reliance on computer modeling and model maintenance.

795,000

<u>Geographic Information System (GIS)</u> - Continues GIS technical support which includes providing geospatial analysis, map production, development and maintenance of various data bases in support of water contracting, land use planning, and water rights.

196,000

<u>Water Quality Activities</u> - Provides water quality and groundwater monitoring, coordination of the Central Valley Project Water Quality Program, and work on the Clean Water Action Plan.

568,000

<u>Central Valley Project/State Water Project</u> - Continues work on groundwater/surface water model and data development. 99,000

Salt and Baron Total Maximum Daily Load/Management Agency Agreement (MAA) Activity - Continues coordination of identified actions in the MAA and the Salt Management Plan to address salinity issues in the Lower San Joaquin River. Activities within this program include developing a Real Time Management Program (RTMP); participation in the policy and technical workgroups associated with the RTMP; coordination of the RTMP with the State's Central Valley Salinity Alternatives for Long-Term Sustainability Program; submission of routine status and informational reports to the Central Valley Regional Water Quality Control Board; and development and implementation of a long-term sustainable program.

Subtotal, Water and Energy Management and Development

\$6,955,000

Land Management and Development - Continues hazardous materials management programs, compliance with the National Historic Preservation Act, Native American Graves Protection and Repatriation Act, museum property management, cultural resources data management, land classification, realty actions, recreation management, environmental management system, and land management activities.

1,449,000

Fish and Wildlife Management and Development -

Other - Continues technical support on fishery issues and work directed by the Fish and Wildlife Coordination Act as it pertains to the CVP. Tasks include meeting with agencies and private organizations to identify environmental problems and needs, determining methods to evaluate environmental impacts, collect and analyze data, and provide recommendations to mitigate impacts.

185,000

impacts.	105,000	
CVPIA Administration ^{1/}	2,000,000	
Anadromous Fish Restoration Program ^{1/}	4,900,000	
Other Central Valley Project Impacts 1/	1,500,000	
Dedicated Project Yield ^{1/}	500,000	
Restoration of Riparian Habitat and Spawning Gravel 1/	5,000,000	
Central Valley Comprehensive Assessment/Monitoring Program ^{1/}	6,000,000	
Anadromous Fish Screen Program ^{1/}	2,500,000	
Refuge Wheeling ^{1/}	16,000,000	
Refuge Water Supply, Facility Construction ^{1/}	7,106,000	
Ecosystem/Water Systems Operation Model ^{1/}	600,000	
Fish and Wildlife Management and Development	46,291,000	
CVP Restoration Funds	(46,106,000)	
Subtotal, Water and Related Resources	185,000	
^{1/} See Central Valley Project Restoration Fund work proposed for description.		

Subtotal, Fish and Wildlife Management and Development

185,000

Facility Operations - Continues miscellaneous operations and maintenance resource management; provides updates of regional policies and guidelines; integrated pest management support; and technical support activities pertaining to CVP operations.

274,000

Facility Maintenance and Rehabilitation - Continues to monitor landslides on Reclamation lands; and continues review of operations and maintenance examinations, and periodic examination of facilities.

180,000

Reclamation Request \$9,043,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Obligations by Function for Operating Projects

Project Repayment FY 2017 Status of NEPA Compliance

CVP, Replacements, Additions, and Extraordinary Maintenance Program (RAX)

LOCATION: This program encompasses the entire Central Valley Project (CVP) in California. The boundary extends from the Cascade Range in the north to the plains along the Kern River in the south.

DESCRIPTION/JUSTIFICATION: Since FY 2000, CVP RAX items previously contained in individual divisions and units of the CVP have been consolidated into a single program. Consolidating all RAX items in the CVP provides a more responsive, cost-effective, and comprehensive management tool to administer the program and to provide a single point of reference regarding CVP RAX items.

AUTHORIZATION: P.L. 74-11, Emergency Relief Appropriation Act of 1935, April 8, 1935. The CVP was authorized by a finding of feasibility by the Secretary of the Interior, and approved by the President on December 2, 1935; P.L. 75-392, Rivers and Harbors Act of 1937, August 26, 1937; P.L. 76-868, Rivers and Harbors Act of 1940, October 17, 1940; P.L. 81-356, American River Division Authorization Act, October 14, 1949; P.L. 87-874, River and Harbors Act of 1962 (Flood Control Act), October 23, 1962; P.L. 91-502, Black Butte Integration Act, October 23, 1970; P.L. 94-423, Reclamation Authorization Act of 1976, September 28, 1976; P.L. 99-546, Water Resource and Small Reclamation Projects, October 27, 1986; and P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
	Enacted	President's Budget
Facility Maintenance and Rehabilitation	\$20,262,000	\$16,362,000
Enacted/Request	\$20,262,000	\$16,362,000
Non-Federal	11,450,300	10,000,000
Prior Year Funds	8,991	0
Total Program	\$31,721,291	\$26,362,000
Prior Year Funds/Non-Federal	(11,459,291)	(10,000,000)
Total Reclamation Allotment	\$20,262,000	\$16,362,000

Explanation of Significant Change in Funding: Decrease of \$3.9 million reflects reduction of work activities at New Melones Dam, Nimbus Powerplant, and Lewiston Dam.

WORK PROPOSED FOR FY 2017:

Facility Maintenance and Rehabilitation -

<u>CVP</u>, <u>American River Division (Folsom Dam and Facilities)</u> – Continues repairs to the radial gate at Nimbus Dam and continues the Folsom Switchyard UHA replacement. \$3,050,000

<u>CVP</u>, West San Joaquin Division (San Luis Facilities) – Continues refurbishing butterfly valves, generator re-winding, and pump casing refurbishment at the Gianelli Pumping/Generating Plant. 5,000,000

<u>CVP, Delta Division (Tracy Facilities)</u> – Continues structural enhancements to the trash rake monorail at Tracy Fish Facility.

40,000

CVP, Shasta Division – Continues to refurbish and modernize the gantry crane at Keswick Dam, replaces the main unit bus at Keswick Powerplant and modifies the traveling fish screen at Coleman Fish Hatchery. Recoat support rod couplers and install cathodic protection on the temperature control device at Shasta Dam.

3,280,000

<u>CVP, Trinity Division</u> – Continues Trinity Dam fixed wheel gate overhaul; replaces existing electrical conduits in the outlet works tunnel, and replaces temperature curtain chain anchor at Whiskeytown Dam. Replaces station service transformers at three Trinity Division powerplants. 4,992,000

<u>CVP Power Customers</u> – Continues power funded CVP RAX facility maintenance and rehabilitation. CVP Preference Power Customers are scheduled to fund activities at Trinity River Powerplant, Spring Creek Powerplant, and the Keswick Buss. 10,000,000

CVP Power Customers (non-Federal)

(10,000,000)

0

Reclamation Request

\$16,362,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

CVP, Sacramento River Division

LOCATION: The Sacramento River Division (Division) is located in Colusa, Glenn, and Tehama counties in northern California.

DESCRIPTION/JUSTIFICATION: The Division consists of the Red Bluff Pumping Plant with a total capacity of 2,000 cubic feet per second (cfs); Corning Pumping Plant, with six units and a total capacity of 477 cfs; Tehama-Colusa Canal system including Reaches 1 through 8A, canal-side pumping plants and distribution systems, approximately 114 miles long, with an initial capacity of 2,530 cfs, extending from Red Bluff Diversion Dam and terminating in Yolo County south of Dunnigan, California; Tehama-Colusa Fish Facilities; Corning Canal, 21 miles long with a diversion capacity of 500 cfs and terminating about four miles southwest of Corning, California; and the Red Bluff Diversion Dam, a concrete weir structure 52 feet high and 5,985 feet long including dikes 1 and 2 that will no longer be used. The Division provides full irrigation service to 34,319 acres and will supply supplemental irrigation service to 105,199 acres.

AUTHORIZATION: P.L. 81-839, Sacramento Valley Canals, September 26, 1950; P.L. 90-65, Amend Sacramento Valley Canals Act, August 19, 1967; and P.L. 102 575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992.

COMPLETION DATA: This is an ongoing project that operates and maintains the facilities within the Central Valley Project (CVP), Sacramento River Division.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
	Enacted	President's Budget
Water and Energy Management and Development	\$811,000	\$811,000
Land Management and Development	208,000	208,000
Fish and Wildlife Management and Development	288,000	288,000
Facility Operations	944,000	694,000
Enacted/Request	\$2,251,000	\$2,001,000
Prior Year Funds	8,045	0
Total Program	\$2,259,045	\$2,001,000
Prior Year Funds	(8,045)	0
Total Reclamation Allotment	\$2,251,000	\$2,001,000

Total Cost Information

	Total Estimated	Total to			Balance to
	Cost	9/30/15	FY 2016	FY 2017	Complete
Reclamation ^{1/}	\$636,456,811	\$636,456,811	0	0	0
Adjustment ^{2/}	20,216,904	11,313,160	0	0	8,903,744
Total ^{3/}	\$656,673,715	\$647,769,971	0	0	\$8,903,744

^{1/} Includes total ARRA funding in the amount of \$112,790,444.

Cost Allocation and Methodology

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Allocation	FY 2016	FY 2017
Irrigation	\$268,371,000	\$203,729,000
Power	78,453,000	50,188,000
Municipal and Industrial Water	25,652,000	19,313,000
Recreation	282,000	282,000
Fish and Wildlife	314,149,000	314,149,000
Flood Control	17,947,000	13,574,000
Navigation	1,291,000	975,000
Deferred Use ^{1/}	54,450,000	54,450,000
Archeological Resources	14,000	14,000
Total ^{2/}	\$760,609,000	\$656,674,000

¹/ Incremental cost of providing extra capacity and elevation in Tehama-Colusa Canal (Reaches 5-8A) to enable future water service to the planned West Sacramento Canal Unit service area. ²/ Rounding adjustment of +\$285 made for allocation purposes.

METHODOLOGY: The operational and financial integration provision of the CVP authorization requires that the cost allocation, ratesetting, and repayment studies be performed for the total project rather than for individual divisions and units. In response to congressional requests for information on individual divisions and units, pro rata shares of the cost allocation for the total authorized projects are shown for the individual divisions and units. Thus, the pro rata share of the project cost allocation shown for this division will change each time there is a change in the total estimated cost of the authorized CVP.

The net decrease in the total cost to be allocated of \$103,935,000 includes reevaluation of outyear requirements for the Tehama-Colusa Canalside Pumping and Gravity Facilities and Red Bluff Pumping Plant and Fish Passage facility.

APPROPRIATION CEILING: Not applicable.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

Water Service and Repayment Contracts - Continues administering and negotiating water service and repayment contracts. Activities include the collection and accounting for revenues to the Reclamation and Restoration funds; processing requests for contracts, contract amendments, water transfers, annexations and detachments; and drafting and commenting on environmental documents related to the aforementioned contract activities. 472,000

²/Includes net other consolidated expenditures and credits of \$516,904 and non-Federal contributions of \$19,700,000.

^{3/}FY 2017 will be the last year of reporting Total Cost Information. Construction funding has concluded.

<u>Water Quality Monitoring</u> - Continues operating and maintaining satellite telemetry stations along the Sacramento River. Water quality data is reported and collected to provide data for trend analysis and historical comparisons, and to determine compliance with water quality standards, statutes, and/or policies.

229,000

<u>Reservoir and River Operations</u> - Continues monitoring and reporting on water operations on the Sacramento River and Stony Creek. 91,000

<u>Groundwater Information and Reporting</u> - Continues management for groundwater data. 19,000

Subtotal, Water and Energy Management and Development

\$811,000

Land Management and Development - Continues Hazardous Materials Management Program, issuance and administration of land use permits, and title boundary research. **208,000**

Fish and Wildlife Management and Development -

Yolo Bypass Salmonid Habitat Restoration and Fish Passage - In order to avoid a jeopardy opinion from the National Marine Fisheries Service and to continue to provide water via the CVP, the Yolo Bypass Salmonid Habitat Restoration and Fish Passage project will develop ecosystem restoration and fish passage alternatives to meet two of the requirements included in the Biological Opinion (BiOp) for the Long Term Coordinated Operation of the CVP and State Water Project. The BiOp requirements include providing up to 20,000 acres of fish rearing habitat in the Lower Sacramento River area and fish passage improvements in the Yolo Bypass. Funding in 2017 will be used to continue work on planning and the environmental compliance process as well as ongoing stakeholder involvement.

288,000

Facility Operations - Continues groundwater monitoring, report preparation, maintenance, and calibration of water meters and stream gauges along the Sacramento River. Continues limited maintenance in and around Tehama-Colusa and Corning canals.

694,000

Reclamation Request

\$2,001,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Land Certification

Obligations by Function for Operating Projects

Project Repayment FY 2017 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Summary of Irrigation Investment

CVP, San Felipe Division

LOCATION: The San Felipe Division (Division) is located in the central coastal area south of San Francisco, California, and encompasses the Santa Clara Valley in Santa Clara County, the northern portion of San Benito County, the southern portion of Santa Cruz County, and the northern edge of Monterey County.

DESCRIPTION/JUSTIFICATION: The Division consists of the San Justo Dam and Reservoir, an earthfill structure 141 feet high, with a crest length of 722 feet, a dike structure 66 feet high, a crest length of 918 feet, and a reservoir capacity of 9,906 acre-feet; Hollister Conduit, 14.3 miles long with a capacity of 83 cubic feet per second; Pacheco Conduit, 7.8 miles long with a capacity of 413 to 480 cubic feet per second; Santa Clara Tunnel and Conduit, 22.4 miles long with a capacity of 330 cubic feet per second; Pacheco Tunnel, 7.1 miles long with a capacity of 480 cubic feet per second; two pumping plants; two switchyards; and 41 miles of transmission line. Water from San Luis Reservoir is being transported to the service area through the Pacheco Tunnel and other principal features. The Pacheco Tunnel Inlet was constructed under authority contained in the San Luis Authorization Act. An integral part of the Central Valley Project (CVP), this Division delivers water supplies developed in the Sacramento River and Old River to users located in the Division service area.

AUTHORIZATION: P.L. 90-72, San Felipe Division, Central Valley Project, August 27, 1967.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

COMPLETION DATA: This is an ongoing project that operates and maintains the facilities of the Central Valley Project (CVP), San Felipe Division.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
·	Enacted	President's Budget
Water and Energy Management and Development	\$175,000	\$124,000
Land Management and Development	130,000	80,000
Fish and Wildlife Management and Development	67,000	67,000
Facility Operations	4,000	4,000
Facility Maintenance and Rehabilitation	71,000	71,000
Enacted/Request	\$447,000	\$346,000
Prior Year Funds	18,638	0
Total Program	\$465,638	\$346,000
Prior Year Funds	(18,638)	0
Total Reclamation Allotment	\$447,000	\$346,000

Total Cost Information*

	Total				
	Estimated	Total to			Balance to
	Cost	9/30/15	FY 2016	FY 2017	Complete
Reclamation	\$374,233,927	\$317,831,638	\$54,000	\$54,000	\$56,294,289
Adjustments 1/	8,941,367	8,941,367	0	0	0
Total ^{2/}	\$383,175,294	\$326,773,005	\$54,000	\$54,000	\$56,294,289

^{*} Includes costs associated with the authorized appropriation ceiling.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation	\$75,068,000	\$74,817,000
Municipal and Industrial Water	270,641,000	269,493,000
Recreation	17,396,000	17,325,000
Fish and Wildlife	17,158,000	17,089,000
Archaeological, Cultural and Historical Resources	105,000	105,000
Safety, Security, Law Enforcement	247,000	247,000
Interest during Construction - Irrigation	4,099,000	4,099,000
Total ^{1/}	\$384,714,000	\$383,175,000

¹⁷ Rounding adjustment of -\$294 made for allocation purposes.

METHODOLOGY: The operational and financial integration provision of the CVP authorization requires that the cost allocation, ratesetting, and repayment studies be performed for the total project rather than individual divisions and units. In response to congressional requests for information on individual divisions and units, pro rata shares of the cost allocation for the total authorized project are shown for the individual divisions and units. Thus, the pro rata share of the project cost allocation shown for this division will change each time there is a change in the total estimated cost of the authorized CVP.

The net decrease in the total cost to be allocated includes \$1,539,000 for wildlife mitigation efforts reclassified as non-construction costs.

APPROPRIATION CEILING: Appropriations authorized are \$359,608,000 (October 2016). The comparable estimated Federal obligation, including \$19,400,000 for a Federal loan to San Benito County Water Conservation and Flood Control District to build a distribution system, is \$374,233,927, which does not exceed the appropriation ceiling by more than the amount of contingencies included in the obligation. This authorization may not be adequate to cover the project as currently proposed. Authorizing legislation may be required to increase the appropriation ceiling to complete the project as authorized. Cost estimates for the Watsonville Facilities are not firm enough to determine if additional appropriation ceiling is necessary. The situation will be analyzed periodically as new and more precise data becomes available to determine the impact of the changes. Appropriate congressional committees will be advised of the ceiling status for this project at the time a firm commitment is made on the construction of the Watsonville Facilities. Current commitments will be held within the existing ceiling.

Includes cash contributions of \$50,000 by the San Felipe Committee for preconstruction studies, \$397,381 by County of San Benito for non-Federal share of cost of public use/recreation facilities at San Justo Reservoir, \$8,465,263 for cost of the Pacheco Tunnel, and \$28,723 for other Federal net property/transfers.

² This is the last year total cost information will be reported. Any future project development will require new legislation.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

<u>Water Marketing and Contracting Activities</u> - Continues water marketing and contracting activities to ensure compliance with Reclamation laws, policies, guidelines, contract provisions and obligations, and environmental requirements.

62,000

National Environmental Policy Act (NEPA) Compliance Activities - Continues analysis and documentation of potential direct, indirect, and cumulative impacts resulting from Federal actions in accordance with NEPA.

62.000

Subtotal, Water and Energy Management and Development

\$124,000

Land Management and Development -

<u>Land Use Compliance</u> - Continues day-to-day land management activities required for the San Justo Reservoir and associated facilities. These activities include oversight and review of public and non-public land use requests; complying with and administering laws and regulations; protection of land resources; and provides NEPA and Endangered Species Act (ESA) compliance in association with public requests to use or alter recreational lands and facilities.

41,000

<u>Land Resource Protection</u> - Continues development and implementation of resource protection plans for fire suppression, waste and hazardous materials management, and soil and moisture conservation to protect public health and safety on Reclamation lands managed for non-operational uses.

39,000

Subtotal, Land Management and Development

80,000

Fish and Wildlife Management and Development -

San Felipe Biological Opinion (BiOp) Implementation - Continues implementation of BiOp requirements. A number of consultations with the U.S. Fish and Wildlife Service under Section 7 of the ESA resulted in BiOps covering interim and long-term water service contracts, continued operation and maintenance of Reclamation facilities, and other site-specific Federal actions.

Environmental Monitoring - Continues environmental monitoring of the effect pest management activities have on threatened and endangered species located on, in, or around project facilities in compliance with Federal and State environmental laws and regulations.

36,000

Subtotal, Fish and Wildlife Management and Development

67,000

Facility Operations - Continues emergency management activities for high and significant hazard dams, which includes table top and functional exercises of the emergency action plan on a three year cycle with annual reviews. **4,000**

Facility Maintenance and Rehabilitation - Continues operation and maintenance reviews, evaluations and facility modifications to meet Federal accessibility standards. Continues work on transfer stipulations for the San Justo Dam and Reservoir. This includes repair of landslides caused by seepage from the reservoir and replacement of toe drains in the dam.

71,000

Reclamation Request

\$346,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Land Certification

Obligations by Function for Operating Projects

Project Repayment FY 2017 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Summary of Irrigation Investment

CVP, San Joaquin Division

LOCATION: The San Joaquin Division (Division) is located in the San Joaquin Valley of central California.

DESCRIPTION/JUSTIFICATION: The Division is an integral part of the Central Valley Project (CVP). The Division was established to implement legislation enacted to protect, restore, and enhance fish, wildlife and associated habitats in the Central Valley of California.

The Water Acquisition Program funding will be used to acquire incremental level 4 water supplies and acquire water supplies to supplement the quantity of water dedicated to fish and wildlife purposes as required by the Central Valley Project Improvement Act.

Land Retirement funding will be used to establish wildlife habitats and acquire drainage impaired agricultural land, which is characterized by low productivity, poor drainage, and high selenium concentrations in the shallow groundwater. This funding will also be used to continue implementation of the Land Retirement Demonstration Project (LRDP).

The goals of the LRDP are to study the impacts of land retirement upon groundwater levels, groundwater and surface water quality, soil chemistry, and biota. This project is needed to provide site-specific scientific data to guide any future implementation of the land retirement program and to develop tools for predicting potential benefits and impacts of retiring lands from irrigated agriculture in the Central Valley. The LRDP evaluates habitat rehabilitation techniques to determine the most effective and economical means to provide safe upland habitats to aid in the recovery of threatened and endangered species in the San Joaquin Valley.

AUTHORIZATION: P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

COMPLETION DATA: This is an ongoing Project that implements activities to protect, restore, and enhance fish, wildlife and associated habitats in the Central Valley of California.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
	Enacted	President's Budget
Fish and Wildlife Management and Development	\$52,000	\$52,000
Enacted/Request	\$52,000	\$52,000
Other Federal ^{1/}	13,587,000	2,300,000
Prior Year Funds	11,175	0
Total Program	\$13,650,175	\$2,352,000
Prior Year Funds/Other-Federal	(13,598,175)	(2,300,000)
Total Reclamation Allotment	\$52,000	\$52,000

^{1/}Central Valley Project Restoration funds.

Total Cost Information*

	Total				
	Estimated	Total to			Balance to
	Cost	9/30/15	FY 2016	FY 2017	Complete
Reclamation	\$287,833,267	\$287,833,267	\$0	\$0	\$0
Adjustments 1/	6,052,690	6,052,690	0	0	0
Total ^{2/}	\$293,885,957	\$293,885,957	\$0	\$0	\$0

^{*} This is the last year total cost information will be reported. Construction activity is substantially complete.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Municipal and Industrial Water Supply	\$20,000	\$20,000
Fish and Wildlife	375,190,000	293,866,000
Total ^{1/}	\$375,210,000	\$293,886,000

¹/Rounding adjustment of +\$43 made for allocation purposes.

METHODOLOGY: The operational and financial integration provision of the CVP authorization requires that cost allocation, rate setting, and repayment studies be performed for the total project rather than individual divisions and units. In response to congressional requests for information on individual divisions and units, pro rata shares of the cost allocation for the total authorized project are shown for the individual divisions and units. Thus, the pro rata share of the project cost allocation shown for this division will change each time there is a change in the total estimated cost of the authorized CVP.

The net decrease in the total cost to be allocated of \$81,323,886 includes reevaluation of outyear requirements of \$76,366,949 for Water Acquisitions; a decrease in costs of \$29,660 for San Joaquin Basin Action Plan and a decrease in costs of \$4,927,277 for Land Retirement.

APPROPRIATION CEILING: Not Applicable.

¹/Includes \$55,978 for transfers, credits and other expenditures and \$5,996,712 for non-Federal cash contributions.

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development -

Water Acquisition Program ¹⁷	2,300,000
Land Retirement Program	<u>52,000</u>
Fish and Wildlife Management and Development	2,352,000
Restoration Fund	<u>(2,300,000)</u>
Subtotal, Fish and Wildlife Management and Development	52,000

^{1/} See Central Valley Project Restoration Fund, Work Proposed for FY 2017 for description of activities funded within Restoration Fund.

<u>Land Retirement</u> - Continues implementation of the Land Retirement Demonstration Project to demonstrate the habitat restoration potential of the 15,000 acres planned to be retired.

Reclamation Request \$52,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Project Repayment for FY 2017 Summary of Irrigation Investment

CVP, Shasta Division

LOCATION: The Shasta Division (Division) is located in Shasta County in northeastern California.

DESCRIPTION/JUSTIFICATION: As an integral part of the Central Valley Project (CVP), this Division develops water and power supplies for delivery to users located in the Shasta Division service area and throughout the CVP. This Division consists of Shasta Dam, a curved concrete gravity structure 602 feet high, a crest length of 3,460 feet, and a lake capacity of 4,552,000 acre-feet; Shasta Powerplant, consisting of five main generating units and two station service units with a total capacity of 710,000 kilowatts; Keswick Dam and Reservoir, a concrete gravity dam 157 feet high with a crest length of 1,046 feet and a capacity of 23,800 acre-feet; and Keswick Powerplant, consisting of three main generating units with a total capacity of 117,000 kilowatts. Over the past 23 years the Clear Creek Restoration Project, mandated under the Central Valley Project Improvement Act, has facilitated improvement of several major fish habitat populations and the return of spring-run Chinook salmon and steelhead to the creek. This program has particular value for precluding further constraints on CVP operations by providing additional habitat for the spring-run. Coleman National Fish Hatchery, funded by Reclamation and operated by the Fish and Wildlife Service, mitigates for Shasta and Keswick Dams by producing juvenile Chinook salmon and steelhead. At the Anderson-Cottonwood Irrigation District (ACID) Diversion Dam, the Secretary was directed to develop and implement a program to resolve fish passage problems at the dam as well as upstream stranding problems related to dam operations. This was accomplished in 2001 with construction of the ACID fish ladder system and public viewing complex. The Division provides supplemental irrigation service to 499,694 acres, 10,710 acre-feet annually for municipal and industrial use, and generation of over 2 million megawatt-hours of hydropower annually. The Division also provides fish and wildlife and flood control benefits.

AUTHORIZATION: Emergency Relief Appropriations Act of 1935, April 8, 1935. The CVP was authorized by a finding of feasibility by the Secretary of the Interior, and approved by the President on December 1, 1935; P.L. 75-392, Rivers and Harbors Act of 1937, August 26, 1937; P.L.76-868, Rivers and Harbors Act of 1940, October 17, 1940; P.L. 99-546, Coordinated Operations Agreement, Suisun Marsh Preservation Agreement and Small Reclamation Projects Act of 1956, as amended; and P.L. 102 575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

COMPLETION DATA: As of September 30, 2015, the CVP, Shasta Division construction projects were 99 percent complete. The remaining activities are ongoing programs that operate and maintain the facilities of the Division and manage the Clear Creek Restoration Program.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
	Enacted	President's Budget
Water and Energy Management and Development	\$336,000	\$336,000
Land Management and Development	104,000	104,000
Fish and Wildlife Management and Development	280,000	280,000
Facility Operations	8,658,000	8,530,000
Enacted/Request	\$9,378,000	\$9,250,000
Other Federal ^{1/} / Non-Federal	9,600,000	13,000,000
Prior Year Funds	54,420	0
Total Program	\$19,032,420	\$22,250,000
Prior Year Funds/Other Federal/Non-Federal	(9,654,420)	(13,000,000)
Total Reclamation Allotment	\$9,378,000	\$9,250,000

^{1/} Central Valley Project Restoration Fund.

Total Cost Information

	Total Estimated	Total to			Balance to
	Cost ^{1/}	9/30/15	FY 2016	FY 2017	Complete
Reclamation	\$323,941,734	\$315,616,150	\$980,000	\$3,980,000	\$3,365,584
Adjustments ^{2/}	9,736,664	9,736,664	0	0	0
Total 3/	\$333,678,398	\$325,352,814	\$980,000	\$3,980,000	\$3,365,584

¹/Includes ARRA funding for the Battle Creek Salmon and Steelhead Restoration program in the amount of \$12,760,243.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation	\$124,008,000	\$120,582,000
Power	36,252,000	29,705,000
Municipal and Industrial Water	11,854,000	11,431,000
Fish and Wildlife	141,657,000	155,157,000
Flood Control	8,293,000	8,034,000
Navigation	597,000	577,000
Safety, Security, Law Enforcement	8,193,000	8,193,000
Total ^{1/}	\$330,854,000	\$333,679,000

^{1/}Rounding adjustment of +\$602 made for allocation purposes.

METHODOLOGY: The operational and financial integration provision of the CVP authorization requires that the cost allocation, ratesetting, and repayment studies be performed for the total project rather than for individual divisions and units. In response to congressional requests for information on individual divisions and units, pro rata shares of the cost allocation for the total authorized project are shown for the individual divisions and units. Thus, the pro rata share of the project cost allocation shown for this division will change each time there is a change in the total estimated cost of the authorized CVP.

²/Includes transfers of -\$128,053 for other consolidated expenditures and credits and non-Federal funding of \$9,864,717.

³/Includes CVP Restoration Funds of \$700,000 in FY 2016 and \$3,700,000 in FY 2017.

The net increase of \$2,825,000 is due to revised funding schedule for the Battle Creek Salmon and Steelhead Restoration Program and the Clear Creek Restoration Program.

APPROPRIATION CEILING: Not applicable.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues the Water Quality Monitoring
Program, and administration of the Water Service and Repayment Contract Program. \$336,000

Land Management and Development -

<u>Hazardous Materials Management Program</u> - Continues to handle, collect, store and/or dispose of hazardous materials and waste throughout the Northern California Area Office. 52,000

<u>Land Management Activities</u> - Continues land management services associated with Reclamation property in the Shasta Division. Activities include the issuance and administration of land use permits, routine inspections of Reclamation properties, title and boundary research, and administration of contracts for construction and maintenance activities on Reclamation land.

52,000

Subtotal, Land Management and Development

104,000

Fish and Wildlife Management and Development -

<u>Clear Creek Restoration</u> - Continues gravel additions that will benefit spawning habitat for spring-run Chinook salmon and steelhead.

Restoration Fund^{1/} $\frac{3,980,000}{(3,700,000)}$ $\frac{280,000}{(3,700,000)}$

Subtotal, Fish and Wildlife Management and Development

280,000

Facility Operations -

<u>Coleman National Fish Hatchery</u> - Continues operation and maintenance of the Coleman National Fish Hatchery, including Living Stone National Fish Hatchery; and a proportional share of the California-Nevada Fish Health Center and the Red Bluff Fish and Wildlife Office. Combined, these offices enable the U.S. Fish and Wildlife Service to meet the responsibilities outlined in the Interagency Agreement approved in March 1993.

5,599,000

<u>Miscellaneous Activities</u> - Continues operation and maintenance of Shasta Dam, Shasta Dam Temperature Control Device, and associated control and monitoring equipment. Central Valley Project Preference Power Customers are funding Keswick Dam and Powerplant and Shasta Powerplant in FY 2017.

Central Valley Project Power Customers (non-Federal) (9,300,000) 2,925,000

<u>Hydrilla Detection and Eradication</u> - Continues to support the aquatic weed research and eradication programs in Shasta County. 6,000

Subtotal, Facility Operations

8,530,000

Reclamation Request

\$9,250,000

^{1/} See Central Valley Project Restoration Fund, Work Proposed for FY 2017 for description of activities funded within Restoration Fund.

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Obligations by Function for Operating Projects

Project Repayment FY 2017 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Summary of Irrigation Investment

CVP, Trinity River Division

LOCATION: The Trinity River Division (Division) of the Central Valley Project (CVP) is located in Trinity County in northwestern California.

DESCRIPTION/JUSTIFICATION: This Division consists of Trinity Dam and Trinity Lake, an earthfill dam 538 feet high with a crest length of 2,450 feet and a storage capacity of 2,448,000 acre-feet; Trinity Powerplant, with two generators and a total capacity of 140,000 kilowatts; Lewiston Dam and Lake, an earthfill structure 91 feet high and 745 feet long with a capacity of 14,660 acre-feet; Lewiston Powerplant, with one unit and a capacity of 350 kilowatts; Trinity River Fish Hatchery; Clear Creek Tunnel, 10.7 miles long; J.F. Carr Powerhouse, with two generators and a total capacity of 154,400 kilowatts; Whiskeytown Dam and Lake, an earthfill structure 282 feet high and a crest length of 4,000 feet with a lake capacity of 241,100 acre-feet; Spring Creek Tunnel and Powerplant, 2.4 miles long with two generators and a total capacity of 180,000 kilowatts; Spring Creek Debris Dam and Reservoir, an earthfill structure 196 feet high, a crest length of 1,110 feet, and a capacity of 5,870 acre-feet; and related pumping and distribution facilities. An integral part of the CVP, the Division develops water and power supplies for delivery to users located in the Division service area and elsewhere in the CVP service area. Facilities constructed under the original Trinity River Act provide full irrigation service to 6,676 acres and supplemental water service to 7,121 acres, 4,810 acre feet annually for municipal and industrial use, and generation of 397,350 kilowatt-hours of hydroelectric power. The Division includes a restoration program designed to return naturally-spawning anadromous fish populations in the Trinity River to the levels which existed before construction of the Division facilities. This helps fulfill the Federal government's trust responsibility to the Hoopa Valley and Yurok Tribes by protecting and restoring the Trinity River fishery.

The Division was authorized in 1955 by Public Law 84-386 to provide water supplies and power generation for California's Central Valley, while specifically directing the Secretary of the Interior to adopt appropriate measures to ensure preservation and propagation of fish and wildlife. The Trinity and Lewiston dams were completed in 1964. In 1981, a Secretarial Decision was issued that increased the flows from Trinity Dam and also directed the U.S. Fish and Wildlife Service (FWS) to prepare a 12-year evaluation of flows and other measures needed to restore the anadromous fishery. In 1984 under P.L. 98-541, Congress enacted the Trinity River Basin Fish and Wildlife Management Act to provide additional authority in order to restore and maintain the fish and wildlife stocks of the Trinity River Basin to those levels existing prior to construction of the CVP Trinity River Division. The Central Valley Project Improvement Act (CVPIA) of 1992, Title 34, P.L. 102-575, further directed the Secretary of the Interior to develop procedures for restoring and maintaining the Trinity River fishery. The Record of Decision (ROD) for the Trinity River Mainstern Fishery Restoration Environmental Impact Statement (EIS) was signed on December 19, 2000, and established the Trinity River Restoration Program (TRRP). It calls for establishment of a strong science program, significant physical/mechanical restoration actions in the mainstem, as well as increased releases to the river from the historical 25 percent up to 48 percent of the average annual inflow to Trinity Reservoir.

The Trinity Management Council (TMC), which includes representatives of Reclamation and the FWS was established in February 2001 to oversee implementation of the preferred alternative. The TRRP field office was established in September 2002 to implement restoration activities and provide support to the TMC. The Trinity Adaptive Management Working Group was established in November 2002 as a Federal advisory committee to allow formal stakeholder participation.

AUTHORIZATION: P.L. 84 386, Trinity River Division, CVP, August 12, 1955; P.L. 96-335, Trinity River Stream Rectification, September 4, 1980; P.L. 98-541, to Provide for the Restoration of the Fish and Wildlife in the Trinity River Basin, California, and for Other Purposes, October 24, 1984; P.L. 102-377, Making Appropriations for Energy and Water Development for the fiscal year ending September 30, 1993, October 2, 1992; P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992; and P.L. 104-143, signed May 15, 1996, Trinity River Basin Fish and Wildlife Management Reauthorization Act of 1995.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating.

COMPLETION DATA: Grass Valley Creek (Buckhorn) Debris Dam was completed in FY 1990 and repairs to the toe drain made in 2012, with 0.2 river miles of anadromous fish habitat improved. Trinity River Hatchery modifications were completed in FY 1991. The Trinity River Flow Evaluation Study was completed in 1999 and the EIS and ROD were finalized in 2000. Four bridges were replaced in 2004-2005 to allow for peak releases of up to 11,000 cfs depending on water year type. Other floodplain structures have been modified or relocated to accommodate the same peak releases. Additional accomplishments in 2003 - 2013 included: 1) construction of 30 channel rehabilitation projects (64 percent of the projects prescribed in the ROD), which includes over 700,000 cubic yards of excavation, 15 river miles of rehabilitated channel, and 300 acres of restored floodplain habitat; 2) augmentation of approximately 48,000 cubic yards of gravel; 3) release of over 7 million acre-feet of restoration flows into the Trinity River mainstem, which includes a peak release of 11,000 cfs in May 2011, the highest fishery restoration flow since construction of the dams in 1964; and 5) implementation of over 20 watershed restoration projects sites using in-kind/match fund contributions from program partners. Collectively, these actions have initiated visible improvements in the river's geomorphic character, in turn contributing to increases in fish habitat quality and quantity. Although some positive population responses have already been observed in anadromous species, given the historic damage to the watershed, additional work is needed to achieve fishery restoration goals. The TMC will continue to evaluate the program to monitor the restoration effort. This is an ongoing Project that operates and maintains the facilities of the Division and manages the Trinity River Restoration Program.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
·	Enacted	President's Budget
Water and Energy Management and Development	\$294,000	\$294,000
Land Management and Development	104,000	104,000
Fish and Wildlife Management and Development	11,911,000	11,780,000
Facility Operations	5,177,000	5,177,000
Enacted/Request	\$17,486,000	\$17,355,000
Other Federal ^{1/} /Non-Federal	6,380,000	7,040,000
Prior Year Funds	13,790	0
Total Program	\$23,879,790	\$24,395,000
Prior Year Funds/Other Federal/Non-Federal	(6,393,790)	(7,040,000)
Total Reclamation Allotment	\$17,486,000	\$17,355,000

Includes Central Valley Project Restoration Fund

Total Cost Information

	Total Estimated	Total to			Balance to
	Cost	9/30/15	FY 2016	FY 2017	Complete
Reclamation	\$459,542,665	\$420,443,729	\$5,819,000	\$5,819,000	\$27,460,936
Adjustments 1/	1,359,365	1,359,365	0	0	0
Total ^{2/}	\$460,902,030	\$421,803,094	\$5,819,000	\$5,819,000	\$27,460,936

¹/Includes transfers of \$1,359,365 for other consolidated expenditures and credits.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation	\$166,710,000	\$172,264,000
Power	48,735,000	42,436,000
Municipal and Industrial Water	15,935,000	16,330,000
Recreation	611,000	611,000
Fish and Wildlife	199,503,000	216,960,000
Flood Control	11,149,000	11,477,000
Navigation	802,000	824,000
Total 1/	\$443,445,000	\$460,902,000

^{1/}Rounding adjustment of \$-30 made for allocation purposes.

METHODOLOGY: The operational and financial integration provision of the CVP authorization requires that the cost allocation, ratesetting, and repayment studies be performed for the total project rather than for individual divisions and units. In response to congressional requests for information on individual divisions and units, pro rata shares of the cost allocation for the total authorized project are shown for the individual divisions and units. Thus, the pro rata share of the project cost allocation shown for this division will change each time there is a change in the total estimated cost of the authorized CVP.

The increase of \$17,457,000 in the total cost to be allocated is due to revisions in outyear projections within the Trinity River Restoration Program (Trinity River Fish and Wildlife Management Program).

²/Includes CVP Restoration Funds of \$1,500,000 in FY 2016 and \$1,500,000 in FY 2017.

APPROPRIATION CEILING: Appropriations authorized are \$593,179,000 (October 2014). The comparable Federal obligation is \$347,797,584. Currently the Division, Grass Valley Creek, and Trinity River Basin Fish, and Wildlife Management Program are under separate appropriation ceilings. Expenditures for work related to the Division will not exceed its total authorized appropriation ceiling. The work authorized under the Grass Valley Creek ceiling has been completed. In addition, the CVPIA provides additional authority for restoring Trinity River fisheries, and authorizes such sums as necessary to carry out those provisions. Work authorized by the CVPIA is not applied against the Division's appropriation ceiling, and, as a result, Federal obligations authorized by the CVPIA are not included in the Division's comparable Federal obligation cited above.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues water quality monitoring at Spring Creek, Buckhorn, Grass Valley Creek, Whiskeytown, Clear Creek, Lewiston Reservoir, Trinity River, and Trinity Lake. \$294,000

Land Management and Development -

<u>Hazardous Materials Management Program</u> - Continues to handle, collect, store and/or dispose of hazardous materials and wastes throughout the Northern California Area Office. 52,000

<u>Land Management Activities</u> - Continues land management services associated with Reclamation property in the Division. Activities include the issuance and administration of land use permits, routine inspections of Reclamation properties, title and boundary research, administration of contracts for construction and maintenance activities on Reclamation land.

52,000

Subtotal, Land Management and Development

104,000

Fish and Wildlife Management and Development -

Trinity River Restoration Program - Continues implementation of the December 2000 ROD, including implementation of a comprehensive monitoring and adaptive management program for fishery restoration. Continues implementing channel rehabilitation projects at various sites along the Trinity River. These projects will be designed to be consistent with desirable future river geomorphology that will improve fishery habitat conditions, increase rearing habitat, which is the limiting factor for river fishery production, and allow the river dynamics necessary to maintain a dynamic system. This includes monitoring and National Environmental Policy Act compliance. Continues watershed restoration, gravel augmentation, and flow releases with two rehabilitation, five watershed projects and the restoration flow releases planned for 2017.

Restoration Fund^{1/} $\frac{13,280,000}{(1,500,000)}$ $\frac{11,780,000}{11,780,000}$

Subtotal, Fish and Wildlife Management and Development

11,780,000

Facility Operations -

<u>Fish and Wildlife Facilities</u> - Continues operations and maintenance (O&M) of the Trinity Fish Hatchery. Funds also covers the increased cost of fish feed that maintain acceptable growth rates and well-being of cultured salmon and steelhead at the Trinity River Hatchery.

3,337,000

^{1/} See Central Valley Project Restoration Fund, Work Proposed for FY 2017 for description of activities funded with Restoration Fund.

Miscellaneous Activities - Continues O&M of Trinity, Whiskeytown, Spring Creek, and Buckhorn dams, including outlet facilities and associated control and monitoring equipment. Continues stream gauges, O&M of Whiskeytown Glory Hole log boom, Whiskeytown Temperature Curtain, Oak Bottom Temperature Curtain and J.F. Carr Powerhouse buoy lines. CVP Preference Power Customers are funding Trinity, Spring Creek, and Lewiston powerplants, J.F. Carr Powerhouse, and Lewiston Dam and Reservoir.

7,369,000

Central Valley Project Power Customers (non-Federal)

(5,540,000) 1,829,000

<u>Hydrilla Detection and Eradication</u> - Continues to support aquatic weed research and eradication programs. 11,000

Subtotal, Facility Operations

5,177,000

Reclamation Request

\$17,355,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Land Certification

Obligations by Function for Operating Projects

Project Repayment FY 2017 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Summary of Irrigation Investment

CVP, Water and Power Operations

LOCATION: The Central Valley Operations Office is located near the regional office in Sacramento County, California.

DESCRIPTION/JUSTIFICATION: The Central Valley Operations Office is responsible for annual water supply allocations for the Central Valley Project (CVP) with forecasted hydroelectric power generation capability. The program includes management of the water resources from the CVP including maintenance of daily water and power schedules, flood control, compliance with statutory requirements, the Coordinated Operating Agreement (P.L. 99-546), and needs of the Western Area Power Administration. The office implements compliance with the Endangered Species Act (ESA) affecting system-wide operations, and implements compliance with the Bay-Delta water quality standards. Close coordination of operations with the State of California, U.S. Department of Energy, and other entities is performed in order to deliver authorized project benefits. The office operates and maintains a supervisory control and data acquisition system to control and monitor operations of project facilities at 16 dams and reservoirs, 11 hydroelectric power generating plants, two pump-storage power generating plants, and various remote data collection sites to comply with water permit and environmental requirements.

AUTHORIZATION: P.L. 74-11, Emergency Relief Appropriation Act of 1935, April 8, 1935. The CVP was authorized by a finding of feasibility by the Secretary of the Interior, and approved by the President on December 2, 1935; P.L. 75-392, Rivers and Harbors Act of 1937, August 26, 1937; P.L. 76-868, Rivers and Harbors Act of 1940, October 17, 1940; P.L. 81-356, American River Division Authorization Act, October 14, 1949; P.L. 87-874, River and Harbors Act of 1962 (Flood Control Act), October 23, 1962; P.L. 91-502, Black Butte Integration Act, October 23, 1970; P.L. 94-423, Reclamation Authorization Act of 1976, September 28, 1976; P.L. 99-546, Coordinated Operations Agreement, Suisun Marsh Preservation Agreement, and Small Reclamation Projects Act of 1956, as amended; and P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992.

PERFORMANCE IMPROVEMENT: This program is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Powering our Future and Responsible use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

110814111111111111111111111111111111111		
Activity	FY 2016	FY 2017
·	Enacted	President's Budget
Water and Energy Management and Development	\$2,122,000	\$1,722,000
Fish and Wildlife Management and Development	2,267,000	2,267,000
Facility Operations	9,990,000	10,140,000
Facility Maintenance and Rehabilitation	403,000	403,000
Enacted/Request	\$14,782,000	\$14,532,000
Non-Federal	7,608,000	7,881,000
Prior Year Funds	3,945	0
Total Program	\$22,393,945	\$22,413,000
Underfinancing	0	0
Prior Year Funds/Non-Federal	(7,611,945)	(7,881,000)
Total Reclamation Allotment	\$14,782,000	\$14,532,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

<u>Water Management</u> - Continues review, investigations, forecasts, and preparation of operations criteria essential for management of CVP water resources. This will include reviewing the Coordinated Operations Agreement. Modifications to Bay-Delta water quality standards and other changes to hydrology in the Central Valley Basin will be analyzed to determine methods to share requirements of the CVP and State Water Project (SWP). The CVP Operations Criteria and Plan (OCAP) will be updated and revised to reflect policies and priorities guiding the multipurpose operation of the project.

\$772,000

NEPA Compliance on Coordinated Long-Term Operation of the CVP and SWP - Continues preparation of NEPA compliance documents for the coordinated long-term operation of the CVP and SWP. In response to court rulings on the 2008/2009 U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) biological opinions for long-term operation of the CVP and SWP, Reclamation will conduct a NEPA analysis prior to accepting and implementing any new or revised biological opinions issued by FWS and/or NMFS. Preparation of NEPA compliance documents involves a multistakeholder process, including continued engagement with the State Department of Water Resources (DWR), State and Federal water contractors and other public water agencies, environmental and fishing interests, and the public. Funding will also support NEPA compliance requirements associated with the preparation of a single FWS/NMFS Integrated Biological Opinion (BiOp) that is intended to incorporate Delta operations proposed by the California Water Fix with coordinated long-term operation of the CVP and SWP. Reduction in funding due to shifting prioritized resources to facilities maintenance to meet new requirements under the North American Electric Reliability Corporation Critical Infrastructure Protection standards, effective April 2016.

<u>Long-Term Folsom Re-operation-Water and Power Costs</u> - Continues water replacement costs in association with costs to re-operate Folsom Dam and Reservoir to provide 100-year flood control to areas along the lower American River.

Subtotal, Water and Energy Management and Development

\$1,722,000

Fish and Wildlife Management and Development - Continues to provide support on ESA compliance issues such as, but not limited to, fish salvage numbers and interservice monitoring. Supports efforts to meet the requirements of the FWS Smelt Biological Opinion and the NMFS Salmon BiOp.

400,000

ESA Compliance on Coordinated Long-Term Operation of the CVP and SWP - Continues ESA consultations with the FWS and NMFS on the coordinated long-term operation of the CVP and SWP. The consultations are required in response to court rulings on the 2008/2009 FWS and NMFS BiOps for long-term operation of the CVP and SWP. Preparation of new consultation packages for both FWS and NMFS involves a multi-stakeholder process, including continuing engagement with the DWR, State and Federal water contractors and other public water agencies, environmental and fishing interests, and the public. Continues development of the NMFS salmonid lifecycle model. ESA compliance requirements are continuing preparation of a multi-agency biological assessment required for development of a FWS/NMFS Integrated BiOp that is intended to incorporate Delta operations proposed by the California Water Fix with coordinated long-term operation of the CVP and SWP.

1,867,000

Subtotal, Fish and Wildlife Management and Development

2,267,000

Facility Operations -

<u>Power Operations</u> - Continues to provide for the power program operational oversight and procedures required to standardize operational practices, conform with sound safety practices, and operate in accordance with applicable laws and agreements.

1,374,000

SWP Barriers/Water Wheeling Project - Continues conveyance of CVP water through SWP facilities to meet water delivery goal. Operations and maintenance of the barriers are necessary for the CVP to utilize Joint Point of Diversion (JPOD) operations at Banks Pumping Plant and to export transfer water across the Delta. The barriers are maintained and operated by the DWR and this program is to compensate DWR for the CVP's share of the expenses.

2,729,000

Continues review and renegotiations of master interconnect contracts to meet project power needs.

CVP Power Customers (non-Federal) 196,000 (196,000)

Continues to review pumping plants, power plants, and attendant facilities to ensure facilities are operated and maintained in accordance with Reclamation standards.

2,290,000

CVP Power Customers (non-Federal)

(2,290,000)

Continues accounting activities involving various power financial matters of which the most prominent is the Power Operations and Maintenance Funding Agreement with the power customers. Continues energy accounting associated with supporting pumping operations for contractual water deliveries.

Continues to provide supervision, program oversight, and leadership of the Power Management Team.

217,000

CVP Power Customers (non-Federal)

(217,000) 0

Continues to provide rapid return to service costs needed to restore any generator outage deemed economical using decision criteria developed by Reclamation staff and contributing power customers.

100,000

CVP Power Customers (non-Federal)

(100,000)

Continues to provide essential generation/load scheduling for the CVP. It also provides supervision and staffing of the CVP Operation Center on 24-hour, 7 day a week basis that performs the Region's real-time water and power management activities.

3,922,000

CVP Power Customers (non-Federal)

(3,922,000)

0

<u>Water Operations</u> - Continues daily integrated operations scheduling for water deliveries from project facilities, flood control, water temperature control, and salinity control. 1,632,000

<u>Hydromet</u> - Continues administration of cooperative agreements with the California Data Exchange Center and California Department of Water Resources for maintaining the Hydromet System. Continues snow surveys in Central Valley watersheds.

460,000

<u>Flood Control Intelligence</u> - Continues to coordinate flood control operations with the River Forecast Center and other participating agencies. 149,000

<u>Central Valley Automated Control System (CVACS)</u> - Continues operation and maintenance of the CVACS installed in powerplants, dams, and the Joint Operations Centers located throughout the Mid-Pacific (MP) Region. 2,001,000

<u>Central Valley Operations Decision Support System (CVODSS)</u> - Continues operation and maintenance of technology supporting complex analysis, planning and coordination needs of decision-makers managing limited natural water resources to meet statutory requirements while providing water deliveries, flood control, and reliable hydropower generation.

550,000

Office Security Program - Continues security program for physical and cyber security measures, security guard contract costs, and video surveillance system maintenance. 795,000

Radio Program - Continues the Radio Communications Program for water and power operations, security and law enforcement for interoperability and mutual aid, maintenance, resource management, and miscellaneous operations. Responsible for the planning, design, acquisition, installation, operations, maintenance, disposal, inspection, and encryption of all radio equipment to include those supporting the Supervisory Control And Data Acquisition (SCADA) system, telemetry, telephone, wide area network, local area network, surveillance, and voice operations with the region. Additionally, the Radio Program is responsible for the design, acquisition, installation and maintenance of all radio communications antennas and towers within the MP Region. Responsible for the management and licensing of all regional radio frequency licenses within the MP Region. Klamath Basin Area Office, Lahontan Basin Area Office, Lake Berryessa (Solano Project), and Bradbury Dam (Cachuma Project) each fund the radio program separately for support services. Provides Departmental and Regional policy updates and guidelines, technical support activities.

Subtotal, Facility Operations

10,140,000

Facility Maintenance and Rehabilitation -

<u>CVACS</u> - Continues equipment replacement and service of the SCADA equipment and software in CVACS. The CVACS provides remote and local plant control for the generators, gates, outlet valves, and auxiliary equipment of the powerplants, dams, and temperature control devices as well as automated data exchange with Federal, State and local agencies. As facility equipment changes due to maintenance, replacement, or upgrades, the physical and cyber interfaces between the SCADA system and equipment has to be upgraded in order to safely operate modified facility infrastructure.

403,000

Continue to provide support to meet North American Electric Reliability Corporation Critical Infrastructure Protection compliance for the Region.

810,000

CVP Power Customers (non-Federal)

(810,000)

Subtotal, Facility Maintenance and Rehabilitation

403,000

Reclamation Request

\$14,532,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

CVP, West San Joaquin Division San Luis Unit

LOCATION: The West San Joaquin Division (Division) is located between Los Banos, Lemoore, and Kettleman City on the west side of the San Joaquin Valley, California, in Fresno, Kings, and Merced counties.

DESCRIPTION/JUSTIFICATION: The Division includes San Luis joint State-Federal facilities consisting of O'Neill Dam and Forebay, a zoned earthfill structure with a height of 87 feet, a crest length of 14,300 feet, and a capacity of 56,500 acre-feet (af) of water; B.F. Sisk (San Luis) Dam and Reservoir, a zoned earthfill structure 382 feet high, a crest length of 18,600 feet, and a reservoir capacity of 2,041,000 af; Gianelli Pumping-Generating Plant, with 8 pumping-generating units each with a capacity of 63,000 horsepower as a motor and 53,000 kilowatts as a generator; Dos Amigos Pumping Plant, containing 6 pumping units, each capable of delivering 2,200 cubic feet per second (cfs); Los Banos and Little Panoche Detention Dam and Reservoirs; and the San Luis Canal from O'Neill Forebay to Kettleman City, a concrete-lined canal 102.5 miles long with a capacity ranging from 8,350 to 13,100 cfs; and necessary switchyard facilities. The Federal-only portion consists of O'Neill Pumping-Generating Plant and Intake Canal, 6 units with a discharge capacity of 700 cfs, a rating of 6,000 horsepower, and a generating capacity of 4,200 kilowatts; Coalinga Canal, 11.6 miles long with an initial capacity of 1,100 cfs; Pleasant Valley Pumping Plant, three 7,000-, three 3,500-, and three 1,250-horsepower units are used to deliver 1.185 cfs into the Coalinga Canal and 50 cfs to a distribution lateral; and the San Luis Drain, of which 85 miles was completed. An integral part of the Central Valley Project (CVP), the San Luis Unit (SLU) delivers water and power supplies developed in the American River, Shasta, and Trinity River Divisions to users located in the unit service area. The Division provides fish and wildlife benefits, recreation, and supplemental irrigation water to 651,000 acres, 26,500 af annually for municipal and industrial use, and generates 227,200 kilowatts of hydroelectric power.

Reclamation constructed and owns a 102.5-mile section of the California Aqueduct, known as the San Luis Canal. It is operated and maintained by the California Department of Water Resources (DWR) according to the agreement for the construction and operation of the joint-use facilities. The capital and annual costs are shared by Reclamation and DWR, 45 and 55 percent, respectively. The San Luis Canal crosses several drainages, running from the Diablo Range eastward to the San Joaquin Valley bottom. The major drainages are being addressed by other studies and actions. However, there are approximately 40 other drainages that enter the San Luis Canal via inlets and culverts. Ponds are formed against the San Luis Canal by approximately a dozen or more areas of drainage and local sheet flow from ephemeral storms.

A 28-mile portion of the San Luis Drain is currently used by the San Luis & Delta-Mendota Water Authority to convey unusable subsurface agricultural drain water to the San Joaquin River. This is the Grassland Bypass Project (GBP) which provides drainage service to the 97,000 acre Grasslands Drainage area located west of Firebaugh and south of Los Banos, California.

The Division provides delivery of water and power supplies developed in the American River, Shasta and Trinity River Divisions to the areas served by the Delta Division, San Luis Unit (SLU), and San Felipe Division. The Division also provides fish and wildlife, flood control, navigation, and recreation benefits.

Status of the Drainage Alternatives - In 2001, in response to a District Court order to promptly provide drainage services, Reclamation submitted to the Court a Plan of Action outlining a schedule to complete a reevaluation of the CVP's SLU drainage service alternatives and the associated Environmental Impact Statement (EIS). The Final EIS was completed in May 2006, consistent with the Plan of Action filed with the Court. The Record of Decision (ROD) for the San Luis Drainage Feature Re-evaluation EIS was signed in March 2007. Reclamation selected the In-Valley Water Needs Land Retirement Alternative for

implementation that will fulfill the requirements of a District Court Order and a Ninth Circuit Court of Appeals ruling that Reclamation has a statutory duty to provide drainage service to the San Luis Unit. Reclamation transmitted a Feasibility Report to Congress in July 2008. The Feasibility Report presented to Congress the relative economic benefits of the drainage plan selected by Reclamation in the ROD and confirmed the need for new authorizing legislation to increase the appropriations ceiling for funding beyond what was authorized by the San Luis Act (Act of June 3, 1960, 74 Stat. 156). In December 2009, in order to comply with the District Court order that the "Secretary of the Interior shall, without delay, provide drainage to the San Luis Unit," Reclamation notified the court that it would initiate implementation of the 2007 ROD on drainage service within the Westlands Water District (WWD), using existing legal authorities. Reclamation must file status reports with the Court every six months detailing the progress and actions taken to comply with terms of Reclamation's plan for implementation of drainage service. Under the current District Court order and Control Schedule, construction of a Demonstration Treatment Plant (demo-plant) is underway. The demo-plant is located in the Northerly Area of the SLU and will be used for the collection of data needed to prepare final design of the reverse osmosis and selenium bio-treatment components of drainage service in the Central sub-unit of WWD. The demo-plant is scheduled to be fully operational in 2016.

In FY 2014, the Court granted the temporary suspension of activities in the Revised Control Schedule except the activities related to the demo-plant for a period of six months from the date of the Orders. On December 6, 2014, Westlands filed another motion requesting to further suspend the Revised Control Schedule for another six months. Following a request from the court for supplemental briefing by Westlands on the absence of harm to the public resulting from further delay, Reclamation filed a motion concurring that a further six-month partial suspension of the Revised Control Schedule within Westlands will not be adverse to the public interest. On September 15, 2015, Reclamation and Westlands signed a drainage Settlement Agreement which would require the enactment of federal authorizing legislation before the Settlement Agreement could be implemented. Following execution of the Settlement Agreement, on October 26, 2015 the Court granted a joint motion filed in conjunction with WWD staying Reclamation's compliance with orders requiring Reclamation to provide drainage service within WWD until January 15, 2017. The requirement for filing six month status reports was upheld and remains an on-going bi-annual requirement. The Court noted it will consider more stringent reporting requirements, among other measures, if there is little or no progress with moving forward on finalizing the settlements and securing enabling legislation. The San Luis, Panoche, and Pacheco Water Districts (San Luis Unit Northerly Districts) settlement discussions are underway and funds are requested to support those efforts.

Reclamation and the San Luis & Delta-Mendota Water Authority (Authority) continue to implement the December 2009 Agreement for Continued Use of the San Luis Drain through December 31, 2019 (Use Agreement). The Use Agreement allows the Authority to convey subsurface drainage water from the Grasslands Drainage Area (GDA) through the San Luis Drain to Mud Slough (north), a tributary of the San Joaquin River, subject to monthly and annual limits on the loads of salts and selenium that may be discharged into Mud Slough. The GDA districts have successfully met these limits through displacement of subsurface drainage water to the San Joaquin River Improvement Project. The 2009 Use Agreement supports the Grassland Bypass Project goals which are to ultimately eliminate discharge of agricultural drainage into the San Joaquin River. Reclamation will be working closely with local farmers and the Authority to meet the requirements of the Use Agreement.

AUTHORIZATION: P.L. 86-488, San Luis Unit, Central Valley Project, June 3, 1960; and P.L. 95-46, San Luis Unit Study, June 15, 1977.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

COMPLETION DATA: As of September 30, 2015, the project was 75 percent complete. A detailed explanation of these changes is described in the methodology section.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
·	Enacted	President's Budget
Water and Energy Management and Development	\$10,016,000	\$2,516,000
Land Management and Development	329,000	329,000
Fish and Wildlife Management and Development	112,000	112,000
Facility Operations	5,991,000	5,863,000
Facility Maintenance and Rehabilitation	52,000	52,000
Enacted/Request	\$16,500,000	\$8,872,000
Prior Year Funds	757,900	0
Total Program	\$17,257,900	\$8,872,000
Prior Year Funds	(757,900)	0
Total Reclamation Allotment	\$16,500,000	\$8,872,000

Total Cost Information*

	Total Estimated	Total to			Balance to
	Cost	9/30/15	FY 2016	FY 2017	Complete
Reclamation	\$2,297,756,399	\$627,765,663	\$9,277,000	\$1,777,000	\$1,658,936,736
Adjustments 1/	212,230,892	212,230,892	0	0	0
Total	\$2,509,987,291	\$839,996,555	\$9,277,000	\$1,777,000	\$1,658,936,736

^{*} Includes costs associated with the authorized appropriation ceiling.

¹/ Includes \$166,666,384 from the State of California for their share of the cost of the San Luis Joint State-Federal water supply facilities. Costs of the joint State-Federal facilities are funded 55 percent State and 45 percent Federal. Costs include \$8,109,487 for construction charges payable by WWD for that portion of the Westlands Distribution System used to deliver project water supplies to the Lemoore Naval Air Station. As provided by Section 2 of the Act of August 10, 1972 (P.L. 92-378), agricultural and grazing lease revenues from lands of the Lemoore Naval Air Station are being used to provide repayment to the United States for construction charges attributable to such lands, which would have been applicable if the Federal government did not own such lands. Costs include \$36,873,302 for the California DWR, toward the State share of cost for the joint State-Federal water supply facilities; \$581,719 for the California DWR for the San Luis Dam Slide repairs.

Cost Allocation and Methodology

Cost illiocation and wicemonogy		
Allocation	FY 2016	FY 2017
Irrigation	\$1,562,067,000	\$1,579,371,000
Municipal and Industrial Water	149,312,000	149,720,000
Recreation	7,169,000	7,169,000
Fish and Wildlife	385,035,000	400,130,000
Flood Control	104,464,000	105,227,000
Navigation	7,515,000	7,557,000
State of California Share	248,310,000	246,712,000
Archaeological Resources	7,000	7,000
Highway Improvements	1,383,000	1,383,000
Kesterson Cleanup	6,800,000	6,800,000
Safety of Dams	4,612,000	4,612,000
Safety, Security, Law Enforcement	1,300,000	1,300,000
Total 1/	\$2,477,974,000	\$2,509,988,000

^{1/}Rounding adjustment of \$709 made for allocation purposes.

METHODOLOGY: The operational and financial integration provision of the CVP authorization requires that the cost allocation, ratesetting, and repayment studies be performed for the total project rather than for individual divisions and units. In response to congressional requests for information on individual divisions and units, pro rata shares of the cost allocation for the total authorized project are shown for the individual divisions and units. Thus, the pro rata share of the project cost allocation shown for this division will change each time there is a change in the total estimated cost of the authorized CVP.

The net increase of \$32,014,000 includes \$4,569,317 for San Luis Drain; and \$2,494,102 for San Luis Drainage Management Program; and \$5,816,344 for San Luis Joint Use Facilities; and \$18,521,000 for Westlands Water District Drainage System; and \$548,000 for Relift Pump Westlands Water District, \$62,000 for San Luis Canal Turnouts; \$3,000 for Other Service Facilities; and \$237 for rounding.

APPROPRIATION CEILING: Appropriations authorized for the Federal and joint-use facilities are \$1,099,534,000 (October 2016). The comparable Federal obligation is \$448,158,931 which does not exceed the ceiling by more than the amount of contingencies included in the obligation. Appropriate congressional committees will be advised of the ceiling status for this portion of the project. Legislation to provide additional appropriation ceiling will be needed to complete the project as authorized.

Appropriations authorized for the San Luis Unit Distribution and Drainage System are \$252,970,311. The comparable Federal obligation is \$197,431,983 (including \$13,640,951 Loan Program funds provided to the San Luis Water District), which does not exceed the ceiling by more than the amount of contingencies included in the obligation. Appropriate congressional committees will be advised of the ceiling status for this portion of the project. Legislation to provide additional appropriation ceiling will be needed to complete the project as authorized. Current commitments will be held within the existing ceiling.

WORK PROPOSED FOR 2017:

Water and Energy Management and Development -

<u>Cantua Creek Design and Construction</u> - Continues Reclamation's support of the corrective construction actions to resolve flooding by the Cantua Creek Stream Group, which causes ponding of flood waters to a 12-mile stretch of the California Aqueduct. This support is included in the Federal share of the San Luis joint-use facilities, as agreed to in the Joint-Agreement with DWR.

5,000

<u>San Luis Canal Cross Drainage Inventory</u> - Continues preparation of required reports to address the San Luis Canal cross drainage problems. 18,000

<u>Drainage Management Program</u> - Continues Reclamation's participation in the Grassland Bypass Project (GBP). The Project collects, manages, and reduces the volume of unusable subsurface agricultural drainage water produced in the 97,000 acre Grassland Drainage Area, and uses the San Luis Drain to convey it to Mud Slough, a tributary of the San Joaquin River. The Project has significantly improved water quality in the San Joaquin River and local wetlands and refuges. FY 2017 activities will help local farmers manage their drainage water and eliminate discharge to the San Luis Drain by January 2017. The Grassland Bypass Project has been a highly successful activity.

860,000

Reclamation will continue to implement actions provided for under the current Court Order and or subsequent Control Schedule if settlement discussions fail. Reclamation will implement the Settlement Agreement and any finalized Northerly District Agreement if enabling legislation is passed and signed into law and the San Luis Act is ultimately amended.

Reduction in funding will allow Reclamation to continue minimal implementation of drainage service activities for the San Luis Unit (SLU) Northerly Area Districts, specifically, those actions associated with the operation and maintenance of the Demonstration Treatment Plant (Demo-Plant) consistent with the SLU 2007 Record of Decision (ROD) and the Courts November 4, 2011 Revised Control Schedule.

Reclamation will continue to implement the GBP San Luis Drain Use Agreement and will work to meet the monthly and annual load values specified in the Waste Discharge Requirements for the GBP.

Water Marketing and Contracting - Continues the administration and negotiation of water related contracts and related activities for contract compliance, repayment, and water marketing activities. 232,000

<u>Arroyo Pasajero Design and Construction</u> - Continues Reclamation support of the Federal share of construction-type activities for the San Luis joint-use facilities, as agreed to in the Joint-Use Agreement with DWR.

5,000

National Environmental Policy Act (NEPA) Compliance - Continues analysis and documentation of potential direct, indirect and cumulative impacts resulting from federal actions in accordance with NEPA. 130,000

Groundwater Monitoring/Water Measurement Quality Assurance/Water Quality Monitoring and Reports - Continues the measurement and data collection of groundwater wells within various irrigation districts for use in preparation of an annual report which will be used to track the beneficial use of project water, analysis of impacts due to groundwater conjunctive use, groundwater modeling efforts, and oversees DWR water measurement program for quality assurance.

334,000

<u>Los Banos Creek Water Resources Management Project</u> - Continues development of additional off-stream storage for water in the SLU. Aspects of this project include pumping water into Los Banos Reservoir from the San Luis Canal for storage for later release to the Los Banos Creek for beneficial groundwater recharge, and pumping water from Los Banos Creek into the Delta-Mendota Canal.

25,000

Subtotal, Water and Energy Management and Development

\$2,516,000

Land Management and Development -

<u>Land Use Compliance</u> - Continues day-to-day land management activities, complying with and administering laws and regulations, execution of agreements, contracts, out-grants or other agreements for the use and management of lands, and the protection of recreation facilities and land resources; and provide NEPA and Endangered Species Act (ESA) compliance in association with public requests to use or alter recreation lands and facilities. Continues land management activities associated with the hazardous materials program, which includes handling, storage, and disposal. 163,000

<u>Land Resource Protection</u> - Continues development and implementation of resource protection plans for fire suppression, non-operational waste and hazardous materials management, and soil and moisture conservation. The primary goal of this activity is to protect public health and safety on non-operational land resources.

133,000

<u>Geographic Information System (GIS) Mapping</u> - Continues development of GIS mapping and databases to provide current mapping of Reclamation lands and facilities. 33,000

Subtotal, Land Management and Development

329,000

Fish and Wildlife Management and Development - Continues the Endangered Species Conservation Program to meet the habitat needs of special status species. Continues implementation of Biological Opinions for interim and long-term contract renewal, to ensure compliance with the ESA of 1973, as amended. Continues monitoring pest management activities on, in, or around the San Luis Canal for compliance with Federal and State environmental laws and regulations. Continues compliance efforts associated with operations and maintenance (O&M) as well as other site specific federal actions.

112,000

Facility Operations -

<u>San Luis Joint-Use Facilities (O&M)</u> - Continues O&M activities for the San Luis joint-use facilities, which includes the B.F. Sisk (San Luis) Dam and Reservoir, and the Gianelli Pumping/Generating Plant, as agreed to in the Joint-Use Agreement with DWR.

5,846,000

<u>Hydrilla Detection and Eradication</u> - Continues the program to control or eradicate aquatic weeds, including hydrilla, so that the facility operations are not impeded and the ability to deliver water and meet contracts is not hampered.

12,000

Emergency Management – Continues emergency management activities for high and significant hazard dams within the SLU, which includes table top and functional exercises of the emergency action plan for B.F. Sisk, O'Neill, Los Banos, and Little Panoche Dams.

5,000

Subtotal, Facility Operations

5,863,000

Facility Maintenance and Rehabilitation - Continues operations and maintenance inspections and facility modifications to meet Federal accessibility standards. 52,000

Reclamation Request \$8,872,000

Note: San Luis Unit, West San Joaquin Division, B.F. Sisk Dam is currently undergoing a safety of dams modification – see the Dam Safety Program listed under the Bureau wide Programs.

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Land Certification

Obligations by Function for Operating Projects

Project Repayment FY 2017 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Summary of Irrigation Investment

Endangered Species Recovery Implementation

LOCATION: Central Valley, Santa Clara-San Benito Counties, Sacramento River, San Joaquin River, and Tulare Lake basins and associated watersheds.

DESCRIPTION/JUSTIFICATION: Provides for the Central Valley Project Conservation Program (CVPCP). This is one of a number of programs initiated as part of an effort by Reclamation and the Fish and Wildlife Service to address impacts to listed species which have resulted from past and continuing actions related to the operation and maintenance of the Central Valley Project (CVP), implementation of the Central Valley Project Improvement Act, Endangered Species Act (ESA) Section 7(a) (1) activities, and other related issues. The CVPCP was established during ESA Section 7 consultations for CVP contract renewals and the Operation Criteria and Plan. The Program uses a proactive and adaptive management approach to develop and implement measures that directly address conservation needs of endangered and threatened species and critical habitats. Since 1997, the CVPCP has funded 134 projects which have contributed toward the permanent protection and/or restoration of nearly 136,000 acres of sensitive habitats, and restoration of endangered species habitats and populations that will assist in the recovery of listed species impacted by the CVP.

AUTHORIZATION: Fish and Wildlife Coordination Act, 16 U.S.C. §661, March 10, 1934, as amended.

PERFORMANCE IMPROVEMENT: The Program is aligned with the Department of the Interior's Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species recovery activities implemented

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
	Enacted	President's Budget
Fish and Wildlife Management and Development	\$1,492,000	\$1,492,000
Enacted/Request	\$1,492,000	\$1,492,000
Non-Federal	0	0
Prior Year Funds	230	0
Total Program	\$1,492,230	\$1,492,000
Prior Year Funds	(230)	0
Total Reclamation Allotment	\$1,492,000	\$1,492,000

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development - Continues land protection, habitat restoration, and other activities to benefit endangered and threatened species and critical habitats in areas affected by the CVP. Enables the acquisition of fee title and/or conservation easements on lands containing riparian, vernal pool, serpentine soil, valley grassland, and alkali scrub habitats, and restores riparian, alkali scrub, serpentine soil, and other CVP-impacted habitats. Provides for the captive breeding and reintroduction of listed species to their historic habitats.

Reclamation Request

\$1,492,000

Klamath Project

LOCATION: The Klamath Project (Project) is located on the Oregon-California border in Oregon's Klamath County and California's Siskiyou and Modoc counties.

DESCRIPTION/JUSTIFICATION: The project includes: Clear Lake Dam and Reservoir, a roller compacted concrete structure with a height of 48 feet, a crest length of 564 feet, and a capacity of 527,000 acre-feet (af); Gerber Dam and Reservoir, a concrete arch structure with a height of 84.5 feet, a crest length of 485 feet, and a capacity of 92,000 af; Link River Dam, a reinforced concrete slab structure with a height of 22 feet, a crest length of 435 feet, and a legal capacity of 515,600 af; Lost River Diversion Dam, a horseshoe shaped arch concrete structure with a height of 42 feet, and a crest length of 675 feet; Anderson-Rose Dam, a reinforced concrete slab and buttress structure with a height of 23 feet, and a crest length of 324 feet; Malone Diversion Dam, an earth embankment with a concrete gate structure with a height of 32 feet and a crest length of 515 feet; Miller Diversion Dam, a concrete weir, removable crest, and earth embankment wing structure with a height of 10 feet and a crest length of 290 feet; the 8-milelong Lost River Diversion Channel, which carries excess water to the Klamath River and supplies additional irrigation water for the reclaimed lake bed of Tule Lake by reverse flow from the Klamath River; 2 tunnels; 14 pumping plants; 185 miles of canals; and over 728 miles of drains, including the Klamath Straits Drain. The Project provides irrigation water to approximately 200,000 acres of agricultural lands and provides water for local National Wildlife Refuges within Project boundaries. The Project also reduces flows into the reclaimed portions of Tule Lake and the restricted Tule Lake Sumps in the Tule Lake National Wildlife Refuge (to support flood control activities). Reclamation operates the Project at its associated facilities to meet multiple obligations, including providing water for irrigation and wildlife refuges, avoiding jeopardy to endangered and threatened species, and in furtherance of its tribal trust obligations.

This funding request will continue activities associated with the Project including, but not limited to: environmental compliance activities, such as requirements related to the National Environmental Policy Act (NEPA), National Historical Preservation Act, Clean Water Act, and Endangered Species Act (ESA); facilities Operations and Maintenance (O&M) activities; water management and monitoring activities; and fishery research and population monitoring activities associated with ESA compliance.

AUTHORIZATION: The Reclamation Act of 1902, (32 Stat. 388) dated June 17, 1902; P.L.104-208, Oregon Resource Conservation Act of 1996, September 30, 1996; P.L. 106-498, Klamath Basin Water Supply Enhancement Act of 2000, November 9, 2000; P.L. 85-624, Fish and Wildlife Coordination Act of 1958; and P.L. 74-46, Soil Conservation Act of 1935.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY2016	FY 2017
·	Enacted	President's Budget
Water and Energy Management and Development	\$5,189,000	\$3,189,000
Land Management and Development	1,380,000	1,380,000
Fish and Wildlife Management and Development	6,810,000	6,810,000
Facility Operations	3,225,000	3,225,000
Facility Maintenance and Rehabilitation	1,396,000	1,396,000
Enacted/Request	\$18,000,000	\$16,000,000
Non-Federal	1,500,000	1,500,000
Prior Year Funds	93,219	0
Total Program	\$19,593,219	\$17,500,000
Prior Year Funds/Non-Federal	(1,593,219)	(1,500,000)
Total Reclamation Allotment	\$18,000,000	\$16,000,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

<u>Klamath Project Operations Planning</u> - Continues the development of the annual operations plan for Project operation, and continues other related planning and environmental compliance activities. The plan would provide guiding principles and direction for water uses for ESA, Indian Trust, and irrigation contracts.

200,000

<u>Water Conservation</u> - Continues activities funded in cooperation with Reclamation contractors, which include, but are not limited to, the review and management of Water Conservation Plans, technical assistance, demonstration projects, grants, cooperative agreements, partnerships, and irrigation efficiency improvements. These activities identify inefficiencies in water distribution and implement opportunities for water savings.

100,000

<u>Water Rights Administration</u> - Continues Reclamation's representation in the adjudication process to justify and defend Reclamation's water rights. The State of Oregon is adjudicating the Klamath River system in Oregon, including Project water rights. The Final Order of Determination prioritizing and quantifying Klamath Basin water rights was issued in 2013, and will be subjected to numerous challenges by Reclamation and other parties. Activities associated with justifying and defending Reclamation's water rights will continue until the process is complete; however, the reduction from 2016 levels reflects reduced efforts on general stream water adjudications.

<u>Water Quality Monitoring</u> - Continues and expands water quality monitoring and quality assurance programs associated with Project operations in the Upper Klamath Basin. Tasks to be completed under this activity include study design, sample collection, coordination of analytical laboratory services, data validation and management, data analysis, and summary report preparation. Data will be used to make decisions regarding the effects of Project operations and activities on endangered fish, wildlife refuges, and other resources. Reclamation has increased water quality monitoring activities to address issues related to endangered species planning, invasive species, project infrastructure, and Clean Water Act issues. The finalization of Total Maximum Daily Loads for the Klamath and Lost Rivers has created the need for Reclamation to conduct increased water quality activities to meet Clean Water Act requirements.

1,415,000

<u>Power Development</u> - Continues investigations of potential activities to provide affordable power to both on-Project and off-Project agricultural users. These investigations focus on renewable power, as well as making existing surplus Federal power available. This work includes environmental compliance for potential implementation of activities, including those to increase efficiency under the NEPA and the California Environmental Quality Act. 393,000

Enhancement Act Studies - Funding for Enhancement Act Studies - previously requested under the Interim Flow and Lake Level Program activity - funding will be used in FY 2017 to finalize Project efforts at a significantly reduced level (specifically in reconnaissance and appraisal level studies of water quality for total maximum daily load (TMDL) compliance. Also, funding will be used for storage studies that could lead to feasibility-level efforts to meet the purposes of the Klamath River Basin Water Supply Enhancement Act of 2000, to develop a small-scale storage opportunity plan, and to meet TMDL water quality compliance requirements. Reduction due to completion of interim feasibility study report in FY 2016 and reduced efforts associated with elimination of portions of the Water Users Mitigation Program.

Subtotal, Water and Energy Management and Development

\$3,189,000

Land Management and Development -

<u>Land Management/Inventory/Disposal</u> - Continues Reclamation's management of approximately 30,000 acres of land. Approximately 1,200 miles of Federally-owned rights-of-way are managed to control trespass and usage for easements, conveyance, and winter water. A portion of the lands, which includes farmland, is leased and generally generates nearly \$2 million of annual revenue stream that is returned to local counties and the Reclamation Fund. Leases requires crops that are compatible with waterfowl management, as determined by U.S. Fish and Wildlife Services. The use of flood-fallowing croplands has provided non-chemical pest eradication and suppression, along with habitat for wildlife, to further the purposes of the National Wildlife Refuge where these lands are located. Continues review of lands owned by the United States for trespass and compliance with hazardous material laws and regulations.

1,380,000

Fish and Wildlife Management and Development -

<u>Klamath Basin Fish Studies</u> - Continues the planning, design, implementation, technical assistance and construction activities to reduce entrainment at Project facilities, where feasible and/or restore river and lake connectivity to allow fish to effectively migrate above and below Project dams. This activity funds both ESA and non-ESA studies to improve conditions affecting species production, survival, and recovery. Funding may also include both short-term and long-term monitoring of restoration activities.

100,000

ESA Compliance - Continues ESA compliance activities recommended or required by the U.S. Fish and Wildlife Service 2013 Biological Opinion (2013 BiOp) that analyzes the effects of the ongoing operations of Reclamation's Klamath Project through March 2023 on Federally listed threatened and endangered species, including but not limited to, the endangered Lost River and shortnose suckers and the threatened coho salmon and their designated critical habitat. Continues research and population monitoring, increasing and building knowledge and application of emerging science to restore fish populations, thereby increasing consistency of water delivery to the Project. 3,275,000

<u>Tribal Funding Agreements & Tribal Trust Responsibilities (Formerly Native American Affairs)</u> - Continues to engage in government-to-government and tribal trust responsibilities with Klamath River Basin Tribes including the Hoopa, Karuk, Yurok, and Klamath Tribes. This activity also provides for fisheries and water quality, research and monitoring of trust resources important to the Klamath Basin

Tribes. The monitoring and research efforts administered by the Tribes are critical for evaluating whether Reclamation is in compliance with ESA requirements outlined in the 2013 BiOp.

2,700,000

ESA - Water Quality Monitoring - Continues ESA related water quality monitoring to address ongoing responsibilities to monitor, document, and research water quality conditions related to endangered species habitat in Project affected waters. Reclamation's water quality monitoring program supports requirements outlined in the 2013 BiOp on Project operations by providing data on water quality as it relates to the survival and persistence of endangered fish species, including the Lost River and shortnose suckers.

Subtotal, Fish and Wildlife Management and Development

6,810,000

Facility Operations -

<u>Klamath Basin Area Office Facility Operations & Maintenance</u> - Continues O&M reviews and inspections of facilities. Reclamation maintains its facilities to assure continued ability to deliver authorized project benefits including irrigation, fish and wildlife, water quality, and flood control. 825,000

<u>Security Issues</u> - Continues O&M of an updated security system for Reclamation-owned project office facilities and A-Canal Headworks.

325,000

<u>Miscellaneous O&M</u> - Continues O&M of Project radio, Supervisory Control and Data Acquisition (SCADA), and other facility communication systems. Continues to provide support services and contract services for Capital Asset and Resource Management Application (CARMA) and for telecommunications between Klamath Basin Area Office, Denver, Region and other non-federal operating entities (irrigation districts).

Reserved Works - Continues operations of Gerber, Clear Lake, Link River, Wilson-Lost River Diversion Dams, Lost River Improved Channels, P-Canal System, Pumping Plants E, EE, F, FF, and the Klamath Straits Drain System. These facilities provide irrigation water, flood control, and control of waters necessary to meet Tribal Trust and ESA obligations.

2,400,000

Non-Federal (Irrigation Districts)

(1,500,000)

900,000

<u>Lease Land Operations</u> - Continues operations for the delivery of irrigation water, maintenance of systems, and lease activities. Facilities located in lease Area K must be maintained and water and drainage service provided to these project lands. Lands are within the refuge and are important for waterfowl and farm income.

500,000

A-Canal Screen Operation & Maintenance - Continues O&M of Reclamation owned A-Canal Headworks facilities and maintains those facilities in proper condition and upkeep. The A-Canal fish screen was built to screen ESA-listed suckers from being brought into the irrigation canal that feeds water to the farming community. These screens filter fish into a pump station, where they are then pumped back into Klamath Lake through an evaluation station.

350,000

Subtotal, Facility Operations

3,225,000

Facility Maintenance and Rehabilitation -

<u>Review O&M Program Examinations</u> - Continues annual reviews of Reclamation facilities (Reserved Works and Transferred Works) and the preparation of reports for those reviews. Identifies corrective actions at Reclamation facilities.

775,000

Klamath Office Replacement - Continues design and construction of a new office building for the Klamath Basin Area Office. It was determined during rehabilitation and Value Engineering studies that the best option is to repair by replacement. The new building will combine office space currently in four separate locations into one and meeting current seismic, energy, and space utilization requirements.

621,000

Subtotal, Facility Maintenance and Rehabilitation

1,396,000

Reclamation Request

\$16,000,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Lahontan Basin Project (Humboldt, Newlands, Truckee Storage, and Washoe Projects)

LOCATION: The Lahontan Basin Project (Project) is located in western Nevada, in the counties of Churchill, Pershing, Washoe, Storey, Douglas and Lyon and in east-central California in Alpine, Sierra, Nevada, Placer, and El Dorado counties.

DESCRIPTION/JUSTIFICATION: With headquarters in Carson City, Nevada's capital, the Lahontan Basin Area Office (Office) has responsibility for the Western Great Basin with a focus on about 80,000 square miles in Nevada and eastern California. The area extends eastward from the Truckee, Carson, and Walker River drainages on the eastern slope of the Sierra Nevada range and covers much of northern and central Nevada.

The Office is responsible for four Reclamation projects: the Newlands Project, which includes Lake Tahoe Dam and Reservoir, Derby Diversion Dam, the Truckee Canal, Lahontan Dam and Reservoir and over 1,000 miles of delivery and drainage facilities; the Washoe Project, which includes Stampede Dam and Reservoir, Prosser Creek Dam and Reservoir, Derby Dam Fish Passage, Marble Bluff Dam, and Pyramid Lake Fishway; the Truckee Storage Project, which includes Boca Dam and Reservoir; and the Humboldt Project, which includes Rye Patch Dam and Reservoir.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 (authorized by the Secretary of the Interior on March 14, 1903); P.L. 69-284, The Omnibus Adjustment Act, May 25, 1926; P.L. 84-858, The Washoe Project Act, August 1, 1956, as amended by P.L. 85-706, August 21, 1958; and P.L. 101-618, The Fallon-Paiute Shoshone Indian Tribes Water Rights Settlement Act of 1990, Title I and Title II, Truckee-Carson-Pyramid Lake and Water Rights Settlement Act, November 16, 1990.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
·	Enacted	President's Budget
Water and Energy Management and Development	\$4,251,000	\$4,251,000
Land Management and Development	2,074,000	2,074,000
Facility Operations	3,071,000	3,071,000
Facility Maintenance and Rehabilitation	405,000	455,000
Enacted/Request	\$9,801,000	\$9,851,000
Non-Federal	200,000	200,000
Prior Year Funds	52,426	0
Total Program	\$10,053,426	\$10,051,000
Prior Year Funds/Non-Federal	(252,426)	(200,000)
Total Reclamation Allotment	\$9,801,000	\$9,851,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

Operating Criteria and Procedures (OCAP) Compliance - Continues OCAP compliance activities for the Newlands Project to minimize the use of the Truckee River and maximize the use of the Carson River. Implementation includes: verifying that only water-righted lands are irrigated, confirming that water rights acquired for the wetlands are eligible for transfer, and determining when the Truckee-Carson Irrigation District is eligible to divert Truckee River water, and analyzing recoupment payment. This regulatory effort enables the provision of substantial benefits for the threatened and endangered fish species in the lower Truckee River and Pyramid Lake, located within the Pyramid Lake Indian Reservation.

Truckee River Operating Agreement (TROA) - Performs a key role in the implementation of TROA, which is designed to honor existing water rights decrees and at the same time operate the Federal and private reservoirs on the river in concert, in order to provide multiple benefits to Truckee River interests including cities, fishery and recreational interests, and the Pyramid Lake Paiute Tribe. Continues work associated with litigation and appeals processes of the Final Environmental Impact Statements and Environmental Assessments, Federal Rule, and modification to existing decrees. Once TROA is implemented, the office of the TROA Administrator is expected to be established by court order, and Reclamation will be responsible for 40 percent of those costs.

<u>Contract Oversight</u> - Provides contract oversight of the Newlands Project Operations and Maintenance (O&M) contract between the Bureau of Reclamation and the Truckee-Carson Irrigation District.

150,000

<u>River Studies</u> - Provides watershed analysis and geomorphology on area rivers to forecast river flow, assess depletion in the upper Carson basin, and improve ability to make the most efficient use of available water resources.

100.000

<u>Truckee Canal Extraordinary Maintenance Project Development</u> - Continues preparation of project documents, environmental compliance, and design development for a project on the Truckee Canal ensuring safe operations of the facility, reducing risk and consequence to public safety, and supporting the agricultural economic needs of the water users including the Indian Trust responsibilities of the Newlands Project.

864,000

Subtotal, Water and Energy Management and Development

\$4,251,000

Land Management and Development -

<u>Recreation Management</u> - Continues cost-share funding for planning, development and modification of recreation facilities on Reclamation lands managed by non-Federal entities. The cost-share partner will need to institute preventative measures in addition to the regular operations. 255,000

Newlands Project Resource Management Plan (RMP) - Continues implementation of the RMP for improved management of associated resources for the Newlands Project. Funds will be used to continue to identify Reclamation lands that are no longer necessary for Project purposes and to restore any excess withdrawn lands to the public domain. Funds will also be used to implement a completely overhauled grazing program necessary to comply with Reclamation Directives and Standards and the National Historic Preservation Act (NHPA).

314,000

<u>Invasive and Nuisance Species Management</u> - Continues both terrestrial weed control and aquatic invasive species prevention programs on Reclamation lands and facilities. 64,000

<u>Land Management</u> - Provides for the administration of 425,000 acres of land including activities dealing with monitoring, grazing leases, utility crossings, encroachments, easements, and abandonments. Funds will also be used to identify Reclamation lands that are determined to be in trespass and undertake remedial activities.

619,000

<u>Geographic Information System (GIS)</u> - Continues to build and update maps and records of Reclamation facilities, lands, and rights-of-way in a GIS database. 403,000

<u>Hazardous Waste Management/Lands Inventory/Removal and Disposal</u> - Inventories Newlands project lands and rights-of-way to ensure project lands are in compliance with Federal, State, and local hazardous waste laws and regulations and removal/disposal activities of Reclamation withdrawn land.

316.000

<u>Title Transfer</u> - Continues compliance work for Section 106 of the NHPA and Hazardous Materials inspections and appraisal reports for the Carson Lake and Pasture, Indian Lakes, and other title transfer activities.

Subtotal, Land Management and Development

2,074,000

Facility Operations -

Oversight of Water Conveyance - Continues oversight of the Newlands project water conveyance system to ensure O&M by the Truckee-Carson Irrigation District is proper and adequate; provide oversight of water conveyance systems, O&M of irrigation and drainage systems, and oversight of delivery and drainage systems for the Fallon Indian Reservation.

715,000

Oversight of Wholesale Water Management - Continues oversight of O&M work related to Tahoe, Prosser, Stampede, Boca and Marble Bluff dams and associated works. Work includes compliance with organizational controls Reclamation has set up in respective policies, directives and standards. These policies, directives and standards include: security and law enforcement evaluations and enhancements, emergency management, high hazard dam safety evaluation and monitoring, and review of operation and maintenance of power generation.

251,000

<u>Stampede Dam and Reservoir</u> - Continues operation and maintenance of the dam, which provides storage of fisheries water dedicated to recovering the endangered cui-ui fish and the threatened Lahontan cutthroat trout. Continues to provide flood control storage, storage of municipal and industrial drought protection water for Reno and Sparks, and reservoir based fisheries and recreation benefits.

Truckee Meadows Water Authority (non-Federal)

484,000
(200,000)
284,000

<u>Stampede Powerplant</u> - Continues O&M of the powerplant. The powerplant provides power for the operation of project works including the Lahontan National Fish Hatchery and Marble Bluff Dam and Fishway.

406,000

<u>Prosser Creek Dam</u> - Continues O&M of the dam. The dam provides flood control storage, storage of water for the benefit of the endangered cui-ui fish and Lahontan cutthroat trout, and reservoir based fisheries and recreation benefits.

375,000

<u>Water Measurement and Gauging Program</u> - Continues to operate and maintain water-gauging stations and make current meter measurements in support of the OCAP for the Newlands Reclamation Project in Nevada.

254,000

<u>Lake Tahoe Dam</u> - Continues O&M of the dam. The dam regulates the outflow of Lake Tahoe to the Truckee River. 349,000

<u>Marble Bluff Fish Facility</u> - Continues O&M of the Marble Bluff Fish Facility located adjacent to Marble Bluff Dam. 227,000

Marble Bluff Dam - Continues O&M of Marble Bluff Dam, which provides spawning passage for the endangered cui-ui fish and threatened Lahontan cutthroat trout residing in Pyramid Lake.

210,000

Subtotal, Facility Operations

3,071,000

Facility Maintenance and Rehabilitation -

Replacements, Additions and Extraordinary Maintenance (RAX) - Continues RAX activities at Stampede, Prosser Creek, and Marble Bluff Dam, Stampede Powerplant, and the Truckee Canal. Activities include Tahoe Dam automation planning, Stampede Powerplant turbine repair, and the Truckee Canal extraordinary maintenance project.

455,000

Reclamation Request \$9,851,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Lake Tahoe Regional Development Program

LOCATION: This project is located in the Lake Tahoe Basin between the Carson and Sierra Nevada Mountain ranges on the California/Nevada border.

DESCRIPTION/JUSTIFICATION: Lake Tahoe is one of the largest (192 square miles), deepest (1,645 feet), and clearest mountain lakes in the world. Declines in water quality and forest health, as well as recent increases in both the number of invasive species and their abundance, are threatening the unique natural values of the area that give the Lake Tahoe Basin its national significance. Reclamation controls the top six feet of Lake Tahoe and operates the dam at the lake outlet on the northwest shore, which is the headwaters of the Lower Truckee River. The Upper Truckee River flows into Lake Tahoe at the southern end of the lake and is the single largest source of sediment and nutrient input into Lake Tahoe. These nutrient inputs lead to algal growth and other symptoms of eutrophication, resulting in loss of lake clarity. Other streams in the Lake Tahoe Basin also contribute sediments and associated nutrients to the lake and cumulatively have a significant impact. The Upper Truckee River has been highly disturbed and altered, especially the reaches adjacent to the Lake Tahoe golf course and the airport, and in the wetland area at the mouth of the river. Restoration of these river reaches, as well as other impacted watersheds in the Lake Tahoe Basin, has multiple environmental benefits. This activity is part of the Lake Tahoe Environmental Improvement Program to prevent further degradation of the water quality of the lake and to provide benefits to fish and wildlife.

AUTHORIZATION: P.L. 108-7, Consolidated Appropriations Resolution, 2003, Water and Related Resources; P.L. 85-624, Fish and Wildlife Coordination Act of 1958; P.L. 101-233, North American Wetlands Conservation Act, December 13, 1989; and P.L. 106-506, Lake Tahoe Restoration Act, December 13, 2000.

PERFORMANCE IMPROVEMENT: The Program is aligned with the Department of the Interior's Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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Activity	FY 2016	FY 2017
	Enacted	President's Budget
Fish and Wildlife Management and Development	\$115,000	\$115,000
Enacted/Request	\$115,000	\$115,000
Non-Federal	0	0
Prior Year Funds	130	0
Total Program	\$115,130	\$115,000
Prior Year Funds/Non-Federal	(130)	0
Total Reclamation Allotment	\$115,000	\$115,000

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development - Continues administration of existing financial assistance agreements under the Program and for projects funded under the Southern Nevada Public Land Management Act for environmental restoration and planning efforts in the Lake Tahoe Basin, including watershed improvements in the Upper Truckee River (including the Lake Valley Reach of the Upper Truckee River and the Upper Truckee River Marsh) and other Lake Tahoe Basin watersheds. Continues participation in the Lake Tahoe Federal Interagency Partnership, and enables compliance with Section 106 of the National Historic Preservation Act, including coordination with grantees on cultural resources issues and consultations with the appropriate State Historic Preservation Officer for projects funded under this Program.

Reclamation Request \$115,000

Orland Project

LOCATION: The Orland Project is located in north-central California, approximately 100 miles north of Sacramento in Colusa, Glenn, and Tehama counties.

DESCRIPTION/JUSTIFICATION: This project includes East Park Dam and Reservoir, a concrete thick-arch structure with a height of 139 feet, a crest length of 266 feet, and a storage capacity of 51,000 acre-feet (af); Stony Gorge Dam and Reservoir, a concrete slab and buttress structure, 139 feet high, a crest length of 868 feet, and a storage capacity of 50,000 af; Rainbow Diversion Dam and Feeder Canal, a concrete arch structure with a height of 44 feet and a crest length of 271 feet; Northside Diversion Dam, a concrete gravity structure with a height of 15 feet and a crest length of 375 feet; and a canal and distribution system, including 16.9 miles of canals and 139 miles of laterals. Project irrigation works are operated and maintained by the Orland Unit Water Users Association. Reclamation operates and maintains recreational facilities at Stony Gorge and East Park reservoirs. This project provides full irrigation service to approximately 20,000 acres with supplemental recreational benefits.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 (authorized by the Secretary of the Interior on October 5, 1907).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

 		
Activity	FY 2016	FY 2017
	Enacted	President's Budget
Facility Operations	\$930,000	\$930,000
Enacted/Request	\$930,000	\$930,000
Prior Year Funds	1,956	0
Total Program	\$931,956	\$930,000
Prior Year Funds	(1,956)	0
Total Reclamation Allotment	\$930,000	\$930,000

WORK PROPOSED FOR FY 2017:

Facility Operations - Continues day-to-day management of recreation facilities and delivery of water for irrigation from Stony Gorge and East Park reservoirs. Continues to provide routine maintenance and replacement of picnic tables, buoy lines, and vehicle barriers. Oversees conservation camp programs for various clean-up projects at Stony Gorge and East Park reservoirs. Continues the replacement of many of the permanent toilet vaults, which have cracks that may lead to the contamination of the reservoirs. Older vaults, which are greater than 20 years old, may have developed cracks due to softening of the surrounding soil over time. Replacement vaults are to be placed at a distance from the reservoir shorelines to ensure continued stable soil conditions. Continue the implementation of the Orland Project Fire Management Plan for wildland fire suppression and prevention. Reclamation staff will administer, plan, and facilitate pre-suppression activities. This includes entering into contracts, agreements, and/or grants

with state and local agencies, such as the California Department of Forestry and Fire Protection (CalFire), the Conservation Corps, United States Forest Service, and others, for pre-suppression fire activities within the 6,800 acres of Reclamation administered lands within East Park and Stony Gorge Reservoir Lands. Pre-suppression activities include the removal of excessive and hazardous vegetation fuel loads and the maintenance of shaded fuel breaks along wildland urban interface. \$930,000

Reclamation Request \$930,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Solano Project

LOCATION: The Solano Project (Project) is located in north-central California, approximately 30 miles west of Sacramento, in Napa and Solano counties.

DESCRIPTION/JUSTIFICATION: The principal features and facilities of this Project include Monticello Dam and Reservoir (Lake Berryessa), a concrete structure with a height of 304 feet above the foundation, a crest length of 1,023 feet, and a storage capacity of 1,602,000 acre-feet (af); Putah Diversion Dam, a gated concrete weir structure with an earthfill embankment wing 29 feet high and a crest length of 910 feet; the 32.3 mile Putah South Canal has a diversion capacity of 956 cubic feet per second (cfs) and a terminal capacity of 116 cfs; Terminal Dam and Reservoir, a compacted earthfill structure 24 feet high and a crest length of 870 feet with a capacity of 119 af; Green Valley Conduit, a high-pressure concrete pipeline ranging in size from 27 inches down to 18 inches in diameter that extends 8,400 feet from the Putah South Canal into Green Valley; and various distribution systems built by local districts. The dams, canals and pipelines are operated and maintained by the Solano Irrigation District. All other facilities are operated and maintained by Reclamation. The project was designed to irrigate approximately 96,000 acres of land. The project furnishes municipal and industrial water to the principal cities of Solano County. Recreational opportunities are available at seven resorts operated by private entities.

AUTHORIZATION: P.L. 76-260, Section 9, Reclamation Project Act of 1939, August 4, 1939; P.L. 93-493, Title VI, Reclamation Development Act of 1974, October 27,1974; P.L. 96-375, Section 5, Feasibility Studies, October 3, 1980.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
·	Enacted	President's Budget
Water and Energy Management and Development	\$107,000	\$107,000
Land Management and Development	1,222,000	1,222,000
Facility Operations	2,183,000	2,183,000
Facility Maintenance and Rehabilitation	184,000	184,000
Enacted/Request	\$3,696,000	\$3,696,000
Prior Year Funds	93,647	0
Total Program	\$3,789,647	\$3,696,000
Prior Year Funds	(93,647)	0
Total Reclamation Allotment	\$3,696,000	\$3,696,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

<u>Energy Conservation activities</u> – Continues to develop cost effective energy conservations plans and the administration of energy conservation activities.

<u>Aquatic Weed Research</u> – Continues research on biological control agents and herbicide efficacy to control aquatic weeds that adversely effect water storage and distributions systems.

16,000

National Environmental Policy Act (NEPA) Compliance Activities - Continues the administration and monitoring of the NEPA process, in adherence with all federally-mandated requirements. New concession contracts will be in effect for major renovation and redevelopment of facilities as a result of the Visitor Services Plan/Record of Decision implementation.

75,000

Subtotal, Water and Energy Management and Development

\$107,000

Land Management and Development - Continues concession oversight and recreation management activities at Lake Berryessa, compliance to hazardous materials handling and clean-up laws, resource management, and planning activities.

1,222,000

Facility Operations - Continues ongoing infrastructure support and renewal of service contracts; routine operation and maintenance of the Lake Berryessa recreation facilities; fire suppression and prevention activities; instrumentation requirements and management oversight of Monticello Dam, Putah Diversion Dam, Putah South Canal, and Terminal Dam and Reservoir.

2,183,000

Facility Maintenance and Rehabilitation - Continues repair and rehabilitation of some projects which are necessary for the continued maintenance of Lake Berryessa recreation facilities. 184,000

Reclamation Request \$3,696,000

SEE APPENDIX FOR: Obligation by Function for Operating Projects

Ventura River Project

LOCATION: The Ventura River Project (Project) is located in southern California about 60 miles northwest of Los Angeles.

DESCRIPTION/JUSTIFICATION: The United States constructed the Ventura River Project, comprising of Casitas Dam and Reservoir, Robels Diversion Dam, Robles-Casitas Canal, and a main conveyance system consisting of pipelines, pumping plants, balancing reservoirs, and necessary appurtenance to convey Project water as set forth in the report submitted to the Congress by the Secretary of Interior, entitled, "Ventura River Project, California Feasibility Report" (H. Doc No. 222, 84 Congress, 1st Session. The Project is authorized for the purpose of supplying water for the irrigation of lands in Ventura County and for municipal, domestic, and industrial uses, and for other incidental beneficial purposes (such as recreation). The Project is a water supply project and is not authorized to serve other purposes, such as flood control or power generation.

The principal Project works are Robles Diversion Dam on the Ventura River and Robles-Casitas Canal leading into Casitas Reservoir and Dam. The Casitas Dam is located on Coyote Creek, about 2 miles above its junction with the Ventura River. The reservoir has a storage capacity of 254,000 acre-feet of water. The Casitas Municipal Water District (District) was formed in October of 1952 and is responsible for the operation and maintenance of Ventura River Project facilities; the District supplies water to 60,000-70,000 people in Western Ventura County, and to hundreds of farms. The District has a large number of agricultural customers whose water needs can change significantly due to variations in weather and rainfall. Water deliveries can be lower than 15,000 acre-feet per year to higher than 23,000 acre-feet in a given year. The District delivers approximately 57 percent to irrigation uses and approximately 43 percent to municipal water uses, and maintains a permanent right to use all water that becomes available through the Project. Water deliveries are facilitated pursuant to License No. 11834 issued in September 1982 to the District by the State of California, State Water Resources Control Board, Division of Water Rights, with a priority water right from circa August 1954. The Casitas Dam was completed in November 1958. Lake Casitas Recreation Area is a very popular destination site with over 750,000 visitors each year.

AUTHORIZATION: P.L. 84-423, March 1, 1956, Ventura River Project, California.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
·	Enacted	President's Budget
Land Management and Development	\$313,000	\$313,000
Facility Operations	5,000	5,000
Facility Maintenance and Rehabilitation	28,000	28,000
Enacted/Request	\$346,000	\$346,000
Prior Year Funds	2,540	0
Total Program	\$348,540	\$346,000
Prior Year Funds	(2,540)	0
Total Reclamation Allotment	\$346,000	\$346,000

WORK PROPOSED FOR 2017:

Land Management and Development -

<u>Land Use Compliance/Open Space Resource Management</u> - Continues Reclamation's responsibility to administer the Casitas Open Space Lands for the protection of the watershed and water quality; manage project lands for recreation, wildlife habitat, preparation and administration of a resource management plan, and other land use compliance activities; and provide National Environmental Policy Act and Endangered Species Act compliance in association with public requests to use or alter recreational lands and facilities.

217,000

<u>Land Resource Protection</u> - Continues development and implementation of resource protection plans for fire suppression, non-operational waste and hazardous materials management, and soil and moisture conservation to protect public health and safety on Reclamation lands managed for non-operational uses.

96,000

Subtotal, Land Management and Development

\$313,000

Facility Operations - Continues emergency management activities for high and significant hazard dams, which includes table top and functional exercises of the emergency action plan for Casitas Dam on a 3-year cycle, with annual reviews. **5,000**

Facility Maintenance and Rehabilitation - Continues inspections and facility modifications to meet Federal accessibility standards. 28,000

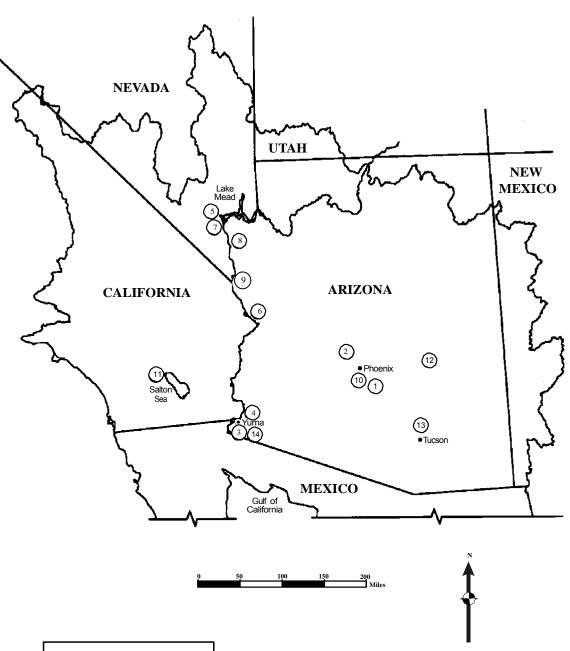
Reclamation Request \$346,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Status of NEPA Compliance

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
LOWER COLORADO REGION
- FY 2017

LOWER COLORADO REGION PROJECTS/PROGRAMS MAP

- 1. Ak-Chin Indian Water Rights Settlement Act Project
- 2. Central Arizona Project
- 3. Colorado River Basin Salinity Control Project Title I
- 4. Colorado River Front Work and Levee System
- 5. Colorado River Water Quality Improvement Program
- 6. Endangered Species Conservation/Recovery Program
- 7. Lake Mead/Las Vegas Wash Program
- 8. Lower Colorado River Operations Program
- 9. Parker Davis Project
- 10. Salt River Project
- 11. Salton Sea Research Project
- 12. San Carlos Apache Tribe Water Settlement Act
- 13. Southern Arizona Water Rights Settlement Act Project
- 14. Yuma Area Projects

Lower Colorado Region FY 2017 Budget Summary (\$000)

		FY 2017							
	FY 2016	Water &	Land	Fish &	Facility	Facility	FY 2017	Other Fed/	Total
Project, Program, Study	Enacted	Energy	Management	Wildlife	Operations	Maintenance	Request	Non-Fed	Program
Ak-Chin Indian Water Rights Settlement Act Project	15,341				15,735		15,735	0	15,735
Colorado River Basin Project, Central Arizona Project	7,078	5,886	386		538	110	6,920	177	7,097
Colorado River Basin Salinity Control Project - Title I	14,170				3,301	12,152	15,453	0	15,453
Colorado River Front Work and Levee System	2,303	2,303					2,303	0	2,303
Colorado River Water Quality Improvement Program	240	240					240	0	240
Endangered Species Conservation/Recovery Project	708			708			708	0	708
Lake Mead/Las Vegas Wash Program	700	700					700	0	700
Lower Colorado River Operations Program	28,345	10,582		16,851			27,433	16,851	44,284
Parker-Davis Project	0						0	15,297	15,297
Salt River Project	899	100	549		63	187	899	207	1,106
Salton Sea Research Project	300	300					300	0	300
San Carlos Apache Tribe Water Settlement Act	150	1,550					1,550	0	1,550
Sierra Vista Subwatershed Feasibility Study	2	0					0	0	0
Southern Arizona Water Rights Settlement Act Project	0						0	5,270	5,270
Yuma Area Projects	25,964	1,315			5,885	19,114	26,314	719	27,033
Subtotal - Water and Related Resources	96,200	22,976	935	17,559	25,522	31,563	98,555	38,521	137,076

LOWER COLORADO REGION FY 2017 OVERVIEW

	FY 20	FY 2017 BUDGET FOR WATER AND RELATED RESOURCES						
FY 2016 Enacted	Water & Energy	Land Managemen t	Fish & Wildlife	Facility Operations	Facility Maintenance	Total Program		
\$96,200,000	\$22,976,000	\$935,000	\$17,559,000	\$25,522,000	\$31,563,000	\$98,555,000		

The Bureau of Reclamation Fiscal Year (FY) 2017 Budget for the Lower Colorado Region (Region) for Water and Related Resources totals \$98.6 million, an increase of \$2.4 million from FY 2016.

The Region encompasses all of the lands drained by rivers flowing into the Pacific Ocean along the coast of California south of the Tehachapi Mountains, and all of the lands drained by the Colorado River south of Lee's Ferry, Arizona. This includes most of Arizona, the extreme western portion of central New Mexico, the southwestern corner of Utah, southern Nevada, and southern California. The Region delivers water to irrigate over 10 million acres of farmland and provides the Nation's winter vegetable supply.

Over the 16-year period from 2000-2015, the lower Colorado River Basin has experienced the driest drought in more than 100 years of record keeping and nearly the lowest in the over 1,200 year tree ring record. In response to the drought, the Region works closely with the lower Colorado River Basin States and Indian Tribes to operate the system in accordance with the "Law of the River," while continuously exploring new conservation efforts and making use of innovative programs to address declining reservoir conditions and increasing demand to support population growth in metropolitan areas including San Diego, Los Angeles, Phoenix, and Las Vegas.

The Region carries out the Secretary of the Interior's role as water master of the lower Colorado River in consultation with the Colorado River Basin States and other interested parties, and operates in accordance with the Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead.

The Region meets commitments included in the 1944 Water Treaty (Treaty) between the United States and Mexico and supplemental Minutes 242 and 319. In accordance with the Treaty, Reclamation delivers 1.5 million acre feet (af) of water annually to Mexico and operates the system to meet salinity limits. Future long-term cooperative measures are contemplated for Minute 319 provisions to protect against drought, enhance riparian and environmental resources, and explore new water source projects in Mexico. Efforts are also underway within the Region to pursue the next agreement with Mexico, building upon the successes of Minute 319. Minute 319 and the binational work with Mexico is identified in the Department of Interior's Strategic Plan as a top agency priority.

Reclamation operates and maintains three hydroelectric plants on the lower Colorado River, which provide energy to users throughout the States of Arizona, California, and Nevada. The maximum capacity for the hydroelectric plants total 2,454 megawatts. Revenue surcharges from power production at Hoover, Parker, and Davis Dams fund the Title II Salinity Control Program and the Central Arizona Project operation and maintenance program. Declining reservoir levels due to drought conditions are driving power users to seek innovative ways to improve power production efficiency.

Maintaining satisfactory facility conditions assocatied with aging infrastructure within the Region remains a challenge. Much of the infrastructure within the Yuma Area Project and the Colorado River Basin Salinity Control Program (Title I) have exceeded their originally estimated useful life. Reclamation continues to address reserved works within the budget requests and efforts are underway with transferred works operators to ensure these entities continue to keep up with their major repair responsibilities. For example, the funding partners have developed a comprehensive plan and have initiated funding for \$50 million in repairs over the next 20 years at Imperial Dam.

The **Water and Energy Management and Development** activity is \$23 million, equal to the 2016 enacted level, which includes the Lower Colorado River Operations Program request of \$10.6 million to carry out the Secretary's direct statutory responsibility to act as water master for the lower Colorado River. These responsibilities include the river's water management issues, implementing the California 4.4 water plan, implementation of the shortage and coordinated operations guidelines, limiting water users to their legal entitlements, and oversight of the implementation activities of Minute 319.

Funding of \$5.9 million for the Central Arizona Project (CAP) will protect native fish to fulfill the Endangered Species Act (ESA) Biological Opinion obligations, as well as plan development for the Tucson Reliability Division.

The Colorado River Front Work and Levee System funding of \$2.3 million will continue development of design alternatives and environmental compliance activities to improve river stability, prevent erosion, and reduce the sediment transport along the Colorado River channel. These activities sustain water deliveries in the United States and to Mexico, and allow Reclamation to continue and complete the reconstruction of Yuma-area groundwater infrastructure which is integral to meeting water delivery requirements in terms of both water quantity and quality in accordance with the Treaty.

The \$1.6 million request for the San Carlos Apache Tribe Water Settlement Act Project continues the assessment of southwestern willow flycatchers on the Gila River downstream of Coolidge Dam, monitoring dam water releases, U.S. Geological Survey gauge data, and precipitation within the watershed. In FY 2017, work will commence between the San Carlos Apache Tribe (Tribe) and Reclamation to plan, design, and perform National Environmental Policy Act activities to construct a project capable of delivering 12,700 acre-feet (af) of allocated CAP water to the Tribe as required by the San Carlos Apache Tribe Water Settlement Act.

The Lake Mead/Las Vegas Wash Program will continue bank stabilization activities to control erosion, prevent wetland degradation, and provide habitat diversity. The Colorado River Water Quality Improvement Program will continue to provide monitoring and investigation of the salinity sources in the Region and identify sources of pollution entering the Colorado River from the Las Vegas Wash. The Salt River Project continues the Verde River Water Resources Study as an avenue to address water supply and demand challenges. Funding for the Salton Sea Research Project will continue coordination and exchange of technical resources with the Salton Sea Authority and other stakeholders, and continue efforts to monitor water quality data trends and mitigate air quality degradation associated with changes in the Salton Sea's surface water level.

The **Land Management and Development** activity is \$935,000, equal to the Region's 2016 enacted level, and provides for land management and resource activities, including soil and hazardous waste management, cultural resources management, wildfire management plans, and accessibility compliance activities. Funding also supports continued efforts with trail access sites on the Salt River Project areas in Phoenix, Tempe, Scottsdale, and Glendale.

The **Fish and Wildlife Management and Development** activity funding is \$17.6 million, an increase of \$200,000 over the 2016 enacted level, of which, \$16.9 million provides for the environmental portion of the Lower Colorado River Operations Program. Funding for the Multi-Species Conservation Program (MSCP) ensures a mechanism to avoid a jeopardy opinion on Reclamation's river operations. This level of funding is required to continue the reasonable and prudent alternatives and measures contained in the Fish and Wildlife Service's Biological Opinion on Reclamation's lower Colorado River operations and maintenance. Non-Federal partners match the Federal funds on a 50/50 basis.

Funding also includes \$708,000 for the Endangered Species Conservation / Recovery Program which provides for the development and implementation of projects for the stewardship of endangered, threatened, proposed, and candidate species that are resident or migratory habitats within the Region.

The **Facility Operations** activity request is \$25.5 million, a \$700,000 increase over the 2016 enacted level, of which, \$15.7 million is for the Ak-Chin Indian Water Rights Settlement Project providing for the delivery of up to 85,000 af of CAP water to the Ak-Chin Indian Community and its lessees. Funding of \$538,000 for the CAP will continue administrative efforts associated with non-Indian distribution systems, including amending contracts to comply with changes directed by the Arizona Water Settlements Act (Act). Operation and maintenance of facilities completed under the Southern Arizona Water Rights Settlement Act Project are funded by the Bureau of Indian Affairs from a Cooperative Fund established by the Arizona Water Settlements Act.

This activity also includes \$3.3 million for continued operation of drainage wells and bypass facilities for the Title I Program, which assures that water delivered to Mexico continues to meet salinity requirements as defined by Minute 242 of the Treaty with Mexico. Funding of \$5.9 million for the Yuma Area Projects will continue water delivery, support river operations, groundwater recovery, operations of storage facilities, flood and drainage control, operations of fish and wildlife facilities along the Colorado River, and land use operations including land conversion, and structures inventory. Efforts to control invasive species, including quagga mussels and giant salvinia, will also continue.

Water and power users fund the Parker-Davis Project under agreements executed in 1999, which provide all of the funding necessary to assure continued operation of the project's dams and powerplants.

The **Facility Maintenance and Rehabilitation** activity is \$31.6 million, an increase of \$1.4 million over the 2016 enacted level, to address infrastructure in need of repair and rehabilitation within the Region.

The \$12.2 million budget for the Title I Program will continue activities to maintain the Yuma Desalting Plant, including the maintenance of the Bypass Drain, the Protective and Regulatory Pumping Unit, as well as the 60 acre plant complex. Funding for the Title I Program also provides for the continued replacement of 35 miles of canal along the Main Outlet Drain Extension (MODE) and removal of deteriorating structures, replaces damaged sections of line, and restores unlined sections that were damaged in the 1993 Gila River flood. Funding for the Yuma Area Projects of \$19.1 million will provide for ongoing maintenance, rehabilitation, and replacement activities for 276 river miles of the Colorado River and the associated water delivery facilities.

Within this activity, water and power users will continue to fund the Parker-Davis Project under agreements executed in 1999. These agreements cover all maintenance costs, including unit rewinds and major equipment replacements and rehabilitation of the Parker Powerplant.

Planned Accomplishments in FY 2017 include the expected delivery of nine million af of water throughout California, Arizona, and Nevada and to Mexico, unless the drought continues and

implementation of the 2007 shortage and coordinated operations guidelines result in 4-7% less deliveries, depending on the severity of water delivery restrictions, which would be triggered by low water levels at major reservoirs. Continue efforts to meet the long term-goal of the MSCP in the establishment of and maintenance of over 8,100 acres of conservation habitat. In FY 2017, over 4,600 acres of created habitat will require post-development monitoring. Promote water conservation efforts through the Water Conservation Field Services grant program, estimating 170 af of water conservation capacity. Plan to complete 270 cubic feet per second miles of conveyance system via the Gila River Siphon. Through the Yuma Area Projects, plan to control 70 percent of the Palo Verde Irrigation and Drainage District area infested with giant salvania and complete work on aging infrastructure related to Senator Wash Penstock Replacement. Through the Title I Program, plan to complete work on aging infrastructure related to the MODE and replacement of the Strand Avenue Bride structure. Maintain 100 percent of hydropower facilities in good condition as measured by Reclamation's Facility Reliability Rating.

Planned Accomplishments in FY 2016 are expected to include the delivery of nine million af of water throughout California, Arizona, and Nevada and to Mexico, unless the drought continues and implementation of the 2007 shortage and coordinated operations guidelines results in 4-7% less deliveries, depending on the severity of water delivery restrictions, which would be triggered by low water levels at major reservoirs. Continue oversight and administration of the Minute 319 implementation. Promote water conservation efforts through the Water Conservation Field Services grant program, estimating 170 af of water conservation capacity. Continue efforts to meet the long term-goal of the MSCP. In FY 2016, over 4,600 acres of created habitat will require post-development monitoring. Through the Title I Program, plan to complete work on aging infrastructure related to the MODE and the replacement of the Headwall and Siphon structure at Avenue 7E. Maintain 100 percent of hydropower facilities in good condition as measured by Reclamation's Facility Reliability Rating.

Accomplishments in FY 2015 included the delivery of over nine million af of Colorado River water throughout California, Arizona, and Nevada and to Mexico. Finalized the 2016 Annual Operating Plan for the Colorado River reservoirs. Continued oversight and implementation efforts with Minute 319, including the development and implementation of a delivery plan for environmental "pulse flow" to the Colorado River delta region. Executed three agreements under the Pilot System Conservation Program with total water savings anticipated to be 30,000 af. A total of 1,407 af of water conservation capacity was achieved through the Water Conservation Field Services grant program. Constructed 3,770 cubic feet per second miles of conveyance system via the Pima Canal. Treated and controlled 29.2 acres of giant salvania infested area within the Palo Verde Irrigation and Drainage District. Established 500 acres of new habitat, managed 3,500 acres of habitat in 11 conservation areas, and stocked over 32,000 endangered fish into the lower Colorado River in support of the MSCP goals. Through the Title I Program, completed work on aging infrastructure related to the MODE and the replacement of the Headwall at the Foturna Siphon structure. Maintained 100 percent of hydropower facilities within the Region in good condition as measured by Reclamation's Facility Reliability Rating. Rehabilitated four penstock gates and installed one new low-head turbine at Hoover Dam, increasing the operational range and flexibility of the hydropower operations, and installed ultrasonic flow meters at Parker Dam.

Ak-Chin Indian Water Rights Settlement Act Project

LOCATION: Ak-Chin Indian Reservation, Pinal County, Arizona.

DESCRIPTION/JUSTIFICATION: The Ak-Chin Settlement Act facilitates delivery of Colorado River water through the Central Arizona Project (CAP) to 16,000 acres of irrigated lands on the Ak-Chin Indian Reservation. The Act requires that this water be delivered at no cost to the Ak-Chin Community.

AUTHORIZATION: P.L. 95-328, Settlement of Ak-Chin Water Rights Claims, July 28, 1978; P.L. 98-530, the Ak-Chin Indian Water Rights Settlement Act, October 19, 1984; P.L. 106-285, Ak-Chin Water Use Amendments Act of 1999, October 10, 2000; and P.L. 108-451, Arizona Water Settlements Act, December 10, 2004.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Facility Operations	\$15,341,000	\$15,735,000
Enacted/Request	\$15,341,000	\$15,735,000
Non-Federal	0	0
Prior Year Funds	1,532	0
Total Program	\$15,342,532	\$15,735,000
Prior Year Funds/Non-Federal	(1,532)	(0)
Total Reclamation Allotment	\$15,341,000	\$15,735,000

WORK PROPOSED IN FY 2017:

Facility Operations - Continues to pay for the delivery of up to 85,000 acre-feet of CAP water to the Ak-Chin Indian Community and its lessees, the operation and maintenance functions and repairs to the on-reservation water distribution system, and Reclamation's portion of the operation and maintenance costs of the Santa Rosa Canal, which delivers water from the CAP aqueduct to the southwest corner of the reservation boundary. The increase is due to higher price per-acre foot for water deliveries.

Reclamation Request \$15,735,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Colorado River Basin Project Central Arizona Project

LOCATION: The Central Arizona Project (CAP) is located in Maricopa, Pima, Gila, La Paz, Mohave, Coconino, Yavapai, and Pinal Counties of Arizona; San Bernardino County, California; Clark County, Nevada; Grant County, New Mexico; and Kane and Washington Counties, Utah. The transmission lines serve both the power and water development portions of the project. They are located in Coconino, Mohave, Yavapai, and Maricopa Counties, Arizona; Kane and Washington Counties, Utah; Clark County, Nevada; and San Bernardino County, California. The non-Indian distribution systems are located in Maricopa, Pinal, and Pima Counties, Arizona.

DESCRIPTION/JUSTIFICATION: The CAP is a multipurpose water resource development and management project which provides irrigation, municipal and industrial water, power generation, flood control, outdoor recreation, environmental enhancement, and sediment control. In addition, the project will provide delivery of tribal homeland water, partial settlement of Indian water rights claims, and economic benefits accruing from the leasing of Indian agricultural water rights to municipal entities. It will provide a partial replacement water supply to 417,773 acres of irrigable lands, which consists of 280,873 acres of non-Indian agricultural land, and up to 136,900 acres of reservation land. In addition, there is up to 764,276 acre-feet of water provided annually for direct municipal and industrial use. The water demand was re-estimated in the 1996 Water Supply Study and, beginning in Fiscal Year (FY) 1997, incorporated into the official cost allocation. In 2000, the water supply delivery estimates were modified to reflect the agreements reached under the settlement negotiations. Benefits to recreation, flood, and sediment control are provided. Although Buttes Dam is an authorized part of the project, it has not been constructed and remains in deferred status, therefore, the sediment control benefits associated with Buttes Dam, Middle Gila Division have been indefinitely deferred. The maximum benefits for recreation will be realized when the Tucson Reliability Division is completed in 2020. Benefits for flood and sediment control were realized upon completion of the modified Theodore Roosevelt Dam in 1996, along with the power benefits associated with the completed New Waddell Dam in 1994. In addition, a power entitlement of 546,750 kilowatts is available to the project through terms within the Navajo Project Participation Agreement.

AUTHORIZATION: P.L. 89-72, Federal Water Project Recreation Act of 1965, July 9, 1965, as amended by P.L. 102-575 - Title XXVIII, Reclamation Recreation Management Act, October 30, 1992; P.L. 90-537, Colorado River Basin Project Act, September 30, 1968; P.L. 97-293 - Title II, Southern Arizona Water Rights Settlement Act of 1982, October 12, 1982; P.L. 97-373, To Amend Title III of the Colorado River Basin Project Act, December 20, 1982; P.L. 100-512, Salt River Pima-Maricopa Indian Community Water Rights Settlement Act of 1988, October 20, 1988; P.L. 101-628, Fort McDowell Indian Community Water Rights Settlement Act of 1990, November 28, 1990; P.L. 102-497, To Make Technical Amendments to Certain Indian Statutes, October 24, 1992; P.L. 102-575 - Title XXXVII, San Carlos Apache Tribe Water Rights Settlement Act of 1992, October 30, 1992, as amended; P.L. 102-575 -Title XXXIX, Siphon Repair and Replacement, October 30, 1992; P.L. 103-434 - Title I, Yavapai-Prescott Indian Water Rights Settlement Act of 1994, October 31, 1994; P.L. 108-447, Division C, Consolidated Appropriations Act of 2005, December 8, 2004; and P.L. 108-451, Arizona Water Settlements Act, December 10, 2004, as amended by P.L. 110-148, December 21, 2007; Reclamation Act of 1902, Titles I and III, as amended; Title XVI of P.L. 102-575, Sec. 1603, as amended; P.L. 111-11, Secure Water Act, Sec. 9504, Water Management Improvement, March 30, 2009; and Endangered Species Act of 1973, as amended.

COMPLETION DATA: Initial operation of the Navajo Generating Station began on May 31, 1974. Initial operation of the last (third) generating unit began April 30, 1976. Initial water via the Hayden-Rhodes Aqueduct was delivered to the Phoenix metropolitan area in 1985. Initial water delivery was

made to users of the Fannin-McFarland Aqueduct and to users in Pinal County in 1986. Initial water delivery to the Ak-Chin Indian Community was made in June 1987. Water deliveries to northern Pina County were made in 1989 and were made to the Tucson area in August 1992.

Water delivery to the Salt River Pima-Maricopa Indian Community began in July 1997. The Southern Arizona Water Rights Settlement Amendments Act of 2004 (the Arizona Water Settlements Act (AWSA), Title III) revised the completion date from July 12, 1993, to January 1, 2009, for the Schuk Toak District and January 1, 2016, for the San Xavier District of the Tohono O'odham Nation. Notice was given to the Tohono O'odham Nation on September 25, 1992, that the CAP aqueduct was capable of making canal side water deliveries. Water deliveries to the Schuk Toak District began in June 2000. Partial water deliveries began in January 2001 to the existing San Xavier Farm and the Farm rehabilitation project was completed in 2007. Fort McDowell Indian Community pre-settlement planning activities, authorized under the CAP, were completed in September 1991. Construction of their delivery system was accomplished under the Small Reclamation Projects Act, as required by the Fort McDowell Indian Community Water Rights Settlement Act of 1990, P.L. 101-628. The Yavapai-Prescott Indian Community's (YPIC) water settlement was ratified October 31, 1994. This resulted in a water rights allocation exchange agreement dated December 28, 1995, between the cities of Scottsdale, Prescott, and Nogales; Cottonwood Water Works; Mayer Domestic Water Improvement District; Rio Rico Utilities; and Camp Verde Water System, Inc. Under the agreement, any financial compensation for the YPIC's water allocation may only be used towards water development. The Gila River Indian Community (GRIC) delivery and distribution system is under construction. The GRIC has progressively completed system components resulting in staged water deliveries beginning in 2005, with full deliveries sometime after 2015. Firm water delivery dates for the remaining Indian communities (Sif Oidak, San Carlos-Apache, Pascua Yaqui, Camp Verde, and Tonto Apache) will be determined when planning is complete.

Water deliveries to the non-Indian distribution systems were made to Harquahala Valley Irrigation District in 1985; Tonopah Irrigation District and Chaparral City Water Company in 1986; and New Magma Irrigation and Drainage District in 1987. Full deliveries were made to Queen Creek, San Tan, and Chandler Heights Citrus Irrigation Districts in 1989. Full deliveries were made to Maricopa-Stanfield and Hohokam Irrigation and Drainage Districts in 1990. The Central Arizona Irrigation and Drainage District was capable of receiving full deliveries in February 1991.

The CAP water supply system stage was declared substantially complete on September 30, 1993, followed by substantial completion declaration of the Regulatory Storage stage in 1996. Project facilities were transferred to the Central Arizona Water Conservation District (CAWCD) for care, operation, and maintenance and the formal Operating Agreement was formally executed in 2000. The Tucson terminal storage stage has yet to be formally declared complete, yet some work previously identified for the Tucson Reliability Division has essentially been determined to not be necessary. Work is under way to formally closeout and declare this stage of the project complete. The remaining stages of the project have been in an indefinite deferred status.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016		FY 20	017
	Enacted		President's	Budget
	Arizona Water	Water &	Arizona Water	Water &
	Settlements	Related	Settlements	Related
Activity	Act	Resources	Act	Resources
Water and Energy Management and				
Development	\$31,991,000	\$6,234,000	\$27,974,000	\$5,886,000
Land Management and Development	0	386,000	0	386,000
Facility Operations	0	348,000	0	538,000
Facility Maintenance & Rehabilitation	0	110,000	0	110,000
Request	\$31,991,000	\$7,078,000	\$27,974,000	\$6,920,000
Non-Federal	0	151,000	0	177,000
Prior Year Funds	0	75,243	0	0
Total Program	\$31,991,000	\$7,304,243	\$27,974,000	\$7,097,000
LCRBDF – AWSA Revenues	(31,991,000)	0	(27,974,000)	0
Prior Year Funds/Non-Federal	0	(226,243)	0	(177,000)
Total Reclamation Allotment	\$0	\$7,078,000	\$0	\$6,920,000

Total Cost Information*

Total Cost Illioini	ution				
	Total Estimated Cost	Total to 9/30/15 4/	FY 2016	FY 2017	Balance to Complete
Lower Colorado		7/30/15	112010	112017	Сотрасс
River Basin					
Development					
Fund 1/	\$4,133,682,413	\$3,476,139,468	\$37,890,000	\$33,525,000	\$586,127,945
Non-Indian					
Distribution					
Systems ^{2/}	240,951,222	240,951,222	0	0	0
Project Total	\$4,374,633,635	\$3,717,090,690	\$37,890,000	\$33,525,000	\$586,127,945
Adjustments 3/	668,642,961	598,952,171	60,000	60,000	69,570,790
Total Costs	\$5,043,276,596	\$4,316,042,861	\$37,950,000	\$33,585,000	\$655,698,735

^{*}Includes costs associated with the authorized appropriation ceiling.

Basin Project Act, as amended by P.L. 97-373.

Represents total Federal obligations financed under authority of section 309(a), P.L. 90-537, Colorado River Basin Project Act for the Lower Colorado River Basin Development Fund, as amended by P.L. 108-451, AWSA. Represents total Federal obligations financed under authority of section 309(b), P.L. 90-537, Colorado River

This amount includes \$2,529,000 for CAP and \$-71,982 for the non-Indian distribution systems for transfer of property; \$229,557,000 contributions provided on modified Plan 6 by local entities; \$12,540,911 for recreation provided by Maricopa County; \$13,473,000 by cost-sharing recreation partners for Tucson Terminal Storage and the aqueduct recreation; \$58,806,130 for non-cash contributions provided by the repayment entities for the non-Indian distribution systems; \$985,000 advanced by the State of Arizona for advance planning work; \$861,838 provided by Maricopa County for construction of Castle Hot Springs Road; \$638,478 provided by Salt River Project for the upgrade to the Theodore Roosevelt Dam Power plant; and \$300,000 contributed by the State of New Mexico for

drilling at Conner Dam site. The City of Tucson's contribution of \$83,579 for the Tucson Pipeline is included, as is the CAWCD's contribution of \$98,645 for a modification of the New River Siphon replacement, along with \$45,587,904 in non-federal construction by CAWCD for deficiency work for the Aqueduct, Permanent Operating Facilities, and New Waddell Dam. The adjustment also includes \$96,458 reimbursable municipal and industrial interest during construction for the non-Indian distribution systems for Chaparral City Water Company, Queen Creek Irrigation District, Chandler Heights Citrus Irrigation District, and San Tan Drainage District. Interest during construction on the Lower Colorado River Basin Development Fund is \$303,157,000 for municipal and industrial, and commercial power.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation 1/	\$1,417,949,746	\$1,418,243,224
Power	624,383,406	624,380,723
Municipal and Industrial Water	1,214,769,735	1,214,999,039
Recreation	128,778,743	129,237,772
Environmental Enhancements ^{2/}	288,000	288,000
Flood Control	124,425,199	124,499,609
Non-Indian Distribution Systems ^{3/}	300,409,561	300,409,561
Indian Distribution Systems 4/	960,695,000	916,835,020
Other ^{5/}	152,487,699	152,487,699
Unallocated Costs 6/	158,721,949	161,895,949
Total	\$5,082,909,038	\$5,043,276,596

¹/ FY 2017 includes \$996,050,000 for costs allocated to Indian irrigation which is eligible for deferral under the Leavitt Act, and \$422,193,224 for costs allocated to non-Indian irrigation.

⁴ Includes funds issued under the American Recovery and Reinvestment Act of 2009.

² Environmental enhancement is one of the originally authorized project purposes under Title III, Section 301(a) of P.L. 90-537.

^{3/} Includes all costs associated with the non-Indian Distribution Systems. These costs are not allocated as part of the allocation procedure, but are assigned directly to the entities constructing and repaying these facilities. Systems include those for municipal use, \$4,524,173 and ten irrigation districts, \$295,885,388.

Indian Distribution Systems is listed separately because water may be used for irrigation, domestic, municipal, and industrial purposes on the reservations in accordance with the Secretary's Decision published March 24, 1983.

Includes non-reimbursable costs of \$45,122,882 for cultural resources as authorized under Section 7 of the Archeological and Historic Preservation Act of 1974 (P.L. 93-291), \$3,500,000 for Pima County flood and erosion control near the city of Marana, and \$50,911,629 non-reimbursable siphon repair costs as authorized under Title XXXIX of P.L. 102-575. Also, includes prepaid costs of \$985,000 for the State of Arizona, \$963,000 for contributed investigation costs, \$900,277 for the Colorado River Division studies, \$861,838 from Maricopa County, Arizona, \$638,478 from Salt River Project for Reclamation to evaluate increasing power generation at the Theodore Roosevelt, \$300,000 from the State of New Mexico, \$84,039 from the City of Tucson for the Tucson pipeline, Maricopa County recreation cost share of \$12,540,911, recreation partners cost share of \$35,581,000 for Tucson Reliability and Hayden-Rhodes and Tucson aqueducts, and \$98,645 from CAWCD for New River Siphon modification.

⁶ Includes costs of \$161,705,949 for the Upper Gila Division which will be allocated when all the beneficiaries and repayment entities are identified and functions determined, plus \$190,000 expended for the Middle Gila Division. P.L. 108-451 provides funding for the ultimate construction of the Upper Gila Division at a minimum of \$66,000,000 and a maximum of \$128,000,000, plus indexing if certain conditions are met and the State of New Mexico decides to move forward with a New Mexico Unit of the CAP. The Middle Gila and Drainage divisions, although authorized, will not be constructed and their costs have been removed from this estimate.

METHODOLOGY: The cost allocation is updated annually for changes made to the Project Cost Estimate.

OTHER INFORMATION:

Water Allocations: A final notice of allocation of project water for Indian irrigation use was published in the Federal Register on October 18, 1976. On December 1, 1980, the Secretary announced a modified allocation and raised the Indian's priority for receiving water. The modified allocation also increased the amount of project water allocated as Indian Priority water to 309,828 acre-feet. The Secretary approved the allocation of project water to non-Indian irrigation users, municipal and industrial water users, and Indian users on February 10, 1983. On November 28, 1990, the Fort McDowell Indian Community Water Rights Settlement Act was passed, which authorized the Secretary to convert Harquahala Valley Irrigation District's original CAP agricultural priority water to an Indian Priority water of up to 33,251 acre-feet. Upon conversion action, the Indian Priority water increases to 343,079 acre-feet. Ten contracts providing water to 12 Indian communities have been executed. Settlement negotiations concerning operations and repayment of the CAP resulted in a stipulated settlement filed with the Federal Court on May 9, 2000, which was finalized on November 21, 2007. The AWSA, P.L. 108-451, was signed into law December 10, 2004, and subsequently amended in December 2007. The Secretary reallocated water on August 25, 2006, in accordance with the Act, which provides up to 667,724 acre-feet under contract with Arizona Indian Tribes or available to the Secretary for future assignment to Arizona Indian Tribes. Similarly, up to 764,276 acre-feet is under contract or available to non-Indian municipal and industrial entities, the Arizona Department of Water Resources, and non-Indian Agricultural entities.

Water Service Contracts: A water service subcontract form was approved by the Secretary in July 1983 and by the CAWCD in November 1983. All of the original non-Indian irrigation districts have declined or relinquished their subcontracted entitlements. The New Magma Irrigation and Drainage District had its subcontract terminated under a plan approved by the United States Bankruptcy Court in 1995. A portion of the Maricopa-Stanfield Irrigation and Drainage District's entitlement was reassigned to the Arizona State Land Department, which currently holds the only non-Indian Agricultural subcontract. There are 58 municipal and industrial water service subcontracts totaling 620,678 acre-feet. In March 1991, the State of Arizona provided recommendations to the Secretary for non-contracted water. On February 5, 1992, the Secretary published in the Federal Register the final notice reallocating 29.3 percent of the project water supply which was allocated to non-Indian agricultural uses, but not yet contracted. Although draft contracts were developed by Reclamation, these documents were never offered due to independent and unapproved contract actions taken by the CAWCD. On January 20, 2000, the Arizona Department of Water Resources recommended to the Secretary that the remaining current unallocated municipal and industrial priority water be allocated to various municipal and industrial entities within the State of Arizona. The Secretary made final allocations on August 25, 2006, to coincide with the AWSA, as described above.

The Act also provides for amendments to CAP contract and subcontracts to provide permanent service contracts with initial delivery terms of at least 100 years. The Tohono O'odham Nation CAP water delivery contract was amended pursuant to the AWSA, and was executed on May 5, 2006. The Gila River Indian Community's CAP water delivery contract was amended pursuant to the AWSA, and was executed on May 15, 2006.

<u>Power:</u> The Colorado River Basin Project Act provided for the Secretary to enter into an agreement with non-Federal interests, whereby the Federal government acquired the right to 24.3 percent of the power produced at the non-Federal Navajo Generating Station. The agreement also includes the delivery of power and energy over the transmission facilities to delivery points within the CAP area. Capital improvements of approximately \$101,800,000 for new sulfur dioxide scrubbers reduced visibility degradation pollution. These became operational in August 1999.

<u>Gila River Biological Opinion Litigation</u>: On April 20, 1994, pursuant to Section 7 of the Endangered Species Act, the U.S. Fish and Wildlife Service (FWS) issued its final Biological Opinion (BiOp) on the transportation and delivery of CAP water to the Gila River Basin.

The BiOp concluded that long-term deliveries of CAP water would jeopardize the continued existence of four native threatened or endangered fish species. In order for the project to avoid the likelihood of jeopardizing the continued existence of these species, the FWS identified several reasonable and prudent alternatives that Reclamation would be required to implement. The measures include the construction of fish barriers, performance of public education programs and fish monitoring, and dedication of long-term funding for research and conservation actions.

On December 22, 2006, Reclamation again reinitiated Section 7 consultation to address potential effects to two newly listed species, the endangered Gila chub and the threatened Chiricahua leopard frog, as well as to integrate the Santa Cruz River sub-basin. The BiOp proposed construction of three tributary barriers in the Santa Cruz sub-basin and extension of funding transfers for an additional five years in lieu of the two mainstream barriers previously considered on the Santa Cruz River. Altogether, Reclamation proposed construction of 12 fish barriers, six of which (Aravaipa Creek, Cottonwood Spring, Blue River, Bonita Creek, Hot Springs, and Fossil Creek) have already been completed. The remaining six barriers are proposed to be completed within 15 years of the date of the finalized BiOp, with a minimum of three to be completed within each five-year period. The BiOp also proposed to add lower Cienega Creek in the Santa Cruz River sub-basin to Reclamation's fish monitoring obligations, increasing the amount of annual funding to the FWS from \$500,000 to \$550,000 to accommodate additional conservation actions for Gila chub, and offered a one-time transfer of \$100,000 to the FWS to assist with Chiricahua leopard frog recovery efforts. A final BiOp was received on May 15, 2008, which incorporated all of Reclamation's proposals as conservation measures. This consultation is now complete.

APPROPRIATION CEILING: The Arizona Water Settlement Act (AWSA) of December 10, 2004, (P.L. 108-451, 82 Stat. 885) provides funding mechanisms for a wide range of other expenditures not included in the original Central Arizona Project Authorization by Congress September 30, 1968. After 2007, all expenditures on the Project are governed by provisions in the AWSA and not the original authorization of the Project (which required the ceiling). The new authorization does not carry any restriction or ceiling, but is limited only by the repayment and other revenues that flow into the Lower Colorado River Basin Development Fund (Fund).

The Arizona Water Settlements Act (Act) amended the Colorado River Basin Project Act to authorize the Lower Colorado River Basin Development Fund (Fund) to be used as the funding mechanism for all authorized components of the Act. The revenues that would have been returned to the Treasury from repayment of the CAP construction costs are now retained and invested for the purposes of the Act. Beginning in January 2010, these funds were available without further appropriation for the specified purposes identified in the Act.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

<u>Upper Gila Division</u> - Continues to gather data and perform analyses necessary to prepare environmental compliance documents associated with a New Mexico Unit (Unit) to exchange waters from the Gila River and its tributaries in New Mexico with CAP water to downstream users. Oversees payments to New Mexico, as authorized by the AWSA, and continues to provide technical assistance associated with engineering, environmental, socio-economic, and cultural resource aspects of a Unit, as necessary to meet CAP and AWSA requirements. Decrease is due to the completion of executing the New Mexico Unit Agreement between Reclamation and New Mexico.

\$100,000

<u>Tucson Reliability Division</u> - Continues work on construction design, cost estimates, environmental analysis (NEPA), construction of recharge and recovery facilities, monitoring, liaison and maintenance responsibilities to the Tohono O'odham Nation's San Xavier and Schuk Toak Districts.

2,040,000

Indian Distribution Division - Gila River Indian Community, Pima-Maricopa Irrigation Project (P-MIP) - The Pima Canal (Reaches BW-1A and BW-1B) is a joint works canal that will convey water from the turnout on the CAP aqueduct to the reservation, and will be the main water supply source for both projects (San Carlos Irrigation Project (SCIP) and P-MIP) when completed. As a joint works facility, the cost to construct the Pima Canal and its appurtenances will be shared by both P-MIP (CAP) and SCIP (AWSA). The GRIC will continue program administration for all the tribal contractor programs, and continue construction for the P-MIP components. Increase is due to increase in the level of construction activities.

San Carlos Apache Tribe - Continues project designs of a Black River Diversion and Conveyance System project configuration. Continues work on NEPA activities (Environmental Impact Statement) and cultural resource surveys and mitigation requirements. Decrease is due to construction delays of the tunnel project configuration.

[2,000,000]

Southern Arizona Water Rights Settlement Act Distribution System - The authorized San Xavier Cooperative Farm extension will be constructed in two phases to allow the efficient development of farm operations as the farm is expanded. Phase I of the extension will include about 350 acres of land adjacent to the lands at the south end of the farm. Phase II will be further south and extend several miles. Continues construction design and NEPA activities for the farm's extension. Decrease is due to delays in pre-construction activities. [2,000,000]

<u>Yavapai Apache - Camp Verde</u> - Continues project designs, continues NEPA activities, completes evaluation of alternatives, and continues construction. Increase is due to planned construction activities. [3,733,000]

Total Indian Distribution Division 27,974,000 LCRBDF - Arizona Water Settlements Act (27,974,000)

Other Project Costs - Program Administration - Continues project management activities for the consolidated CAP. Activities include preparation of reports to meet congressional and departmental requirements relating to the project's overall construction program, workers' compensation associated with injuries incurred during the construction of the CAP, updates to the Project Cost Estimate and annual updates to the project cost allocation. Work also includes Coconino Dam site Remediation and land disposal.

<u>Curation Facilities</u> - Continues refinement of the museum property database, public education and outreach program, curation management, and training. CAP collections made prior to 2013 are curated at the Huhugam Heritage Center. CAP Collections made after 2013 will be curated at the Center for Archaeology and Society of Arizona State University.

185,000

Native Fish Protection - Continues work with the FWS to meet legal requirements under Section 7 Biological Opinion for the Gila River CAP including non-native fish eradication, native fish conservation, and the education and information program. Also continues work on the placement, design, monitoring and construction of barriers to meet established goals that ensure reliable and legal operation of the CAP.

2.610.000

Total Other Project Costs

3,311,000

Other Activities - Continues to maintain and develop mission-essential water resources core competencies and capabilities, key to a multitude of cooperative planning efforts, program developments, and active participation on various teams to develop new water resources initiatives. Continues to provide Reclamation stakeholders with long-term value-added solutions to mounting water resources challenges, including supply and demand imbalances, competing uses, issues associated with infrastructure limitations, environmental water needs, and addressing the threat of climate change. 435,000

Subtotal, Water and Energy Management and Development

\$5,886,000

Land Management and Development -

Recreation Development – Coordination with local sponsor on management/use issues. Continuesrecreational development of approved public use facilities.160,000Non-Federal Non-Cash Participation – City of Phoenix(60,000)100,000

<u>Land Management</u> - Continues land management activities including financial management, relinquishment or withdrawal actions with other agencies, record management activities, management of jurisdictional lands with no operating agreement or entity, review land use applications, and Fire Management Plan support. Continues coordination with the Bureau of Land Management (BLM) and the Arizona State Land Department on collateral land use issues, the return excess withdrawn lands, and cultural resource administration. Continues review of BLM applications and resource management plans, as well as the preparation of mandatory reports and performance of land field reviews. Continues public trail development and management with Pima County.

271,000

<u>Recreation Management</u> - Continues sponsorship of fishing events for children with disabilities and disadvantages at Lake Pleasant. 15,000

Subtotal, Land Management and Development

\$386,000

Facility Operations -

<u>Distribution Systems</u> - Continues administration of repayment and water allocation contracts with distribution system entities to comply with the AWSA. Coordinates with contractors on CAP energy issues to support the Secretary's long-term low emitting energy goals. Monitors water district reserve funds, determines interest for non-agricultural water use and co-mingling fees, performs municipal and industrial conversion actions, and other administrative actions associated with irrigation districts. Continues engineering reviews of facility modifications and relocations, execution of land use agreements, and update of records and drawings. Increase is to engage in CAP energy issues.

655,000 (117,000)

Non-Federal Cash Contributions: Various

538,000

Subtotal, Facility Operations

\$538,000

Facility Maintenance and Rehabilitation - Continues dam safety, program management, structure and facility examinations. Continues the preparation and review of examination reports. Continues drawings and facility record updates. Continues the performance of risk assessments, including the preparation and implementation of recommendations for corrective work and development of facility ratings. Continues the development and evaluation of emergency management programs and procedures.

Facility Maintenance and Rehabilitation

\$110,000

Reclamation Request

\$6,920,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 1, 2017

Obligation by Function for Operating Projects

Project Repayment for FY 2017 Status of NEPA Compliance

Status of Water and Repayment Contracts Summary of Irrigation Investments

Colorado River Basin Salinity Control Project - Title I

LOCATION: This project is located in southwestern Arizona in Yuma County and southeastern California in Imperial County.

DESCRIPTION/JUSTIFICATION: The project activities allow for compliance with Minute 242 of the 1944 Water Treaty (Treaty) with Mexico. This includes maintaining the bypass drain in the United States and Mexico, operating and maintaining the 242 wellfield, maintaining the Yuma Desalting Plant (YDP), a 60-acre facility, and providing lab services to support salinity calculations and the YDP water quality analysis.

The project provides for the enhancement and protection of the quality of water available in the Colorado River for the United States and Mexico and compliance with the requirements of Minute 242 approved August 30, 1973, under the Treaty. In executing the plan to reduce the quantity and improve the quality of Wellton-Mohawk Division drainage so the majority of it can be credited toward Treaty deliveries, several measures were implemented: (1) construction of the YDP; (2) construction of the bypass drain in the United States and Mexico; (3) implementation of the Wellton-Mohawk Irrigation Efficiency Improvement Program; (4) Wellton-Mohawk acreage reduction; (5) Painted Rock Reservoir land acquisition and operation schedule modification; (6) construction of the Main Outlet Drain Extension (MODE) Siphon; and (7) completion of environmental mitigation measures.

AUTHORIZATION: P.L. 93-320, Colorado River Basin Salinity Control Act, Title I, June 24, 1974; and P.L. 96-336, Amend Colorado River Basin Salinity Control Act, September 4, 1980.

COMPLETION DATA: As of September 30, 2015, this project was 93 percent complete. The 14 wells and associated features and the Protective and Regulatory Pumping Unit were completed in FY 1979, an additional 7 wells and associated features were completed in FY 1984, additional wells and associated features will be constructed based on need. The YDP was completed in FY 1991 and test operation of the main facility was completed and production of desalting water began in FY 1992. In FY 1993, the YDP was placed in ready reserve status.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Facility Operations	\$3,031,000	\$3,301,000
Facility Maintenance and Rehabilitation	11,139,000	12,152,000
Enacted/Request	\$14,170,000	\$15,453,000
Non-Federal	0	0
Prior Year Funds	81,835	0
Total Program	\$14,251,835	\$15,453,000
Prior Year Funds/Non-Federal	(81,835)	0
Total Reclamation Allotment	\$14,170,000	\$15,453,000

Total Cost Information

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation	\$453,075,000	\$421,300,652	\$0	\$0	\$31,774,348
Adjustments	715,000	715,000	0	0	0
Total	\$453,790,000	\$422,015,652	\$0	\$0	\$31,774,348

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation	\$45,938,000	\$45,938,000
Mexican Treaty	407,688,000	407,688,000
Other 1/	164,000	164,000
Total	\$453,790,000	\$453,790,000

¹/ Nonreimbursable preauthorization investigations costs (P.L. 92-149).

METHODOLOGY: The Separable Costs Remaining Benefits methodology of cost allocation has not been revised.

APPROPRIATION CEILING: Ceiling calculation will no longer be prepared until such time as there is a need to construct additional YDP facilities. The authorized ceiling was \$547,290,000 (October 2003) and the comparable estimated total Federal obligation was \$453,790,000. The ceiling authorization is adequate to cover the project as currently proposed.

OTHER INFORMATION: Reclamation will continue to maintain the YDP and correct design deficiencies as funds become available. With adequate funding, the YDP could be ready for long-term operation at full capacity within four years. Reclamation, in collaboration with representatives from

California, Arizona, and Nevada signed a funding agreement on October 29, 2009 for a Pilot Run of the YDP for not more than 365 days of operation at up to one-third of YDP capacity, and the conservation of 29,000 acre-feet (af) of water. The Pilot Run began on May 3, 2010. It concluded ahead of schedule on March 26, 2011, and conserved 30,496 af of water.

WORK PROPOSED FOR FY 2017:

Facility Operations - Continues operations and management of water quality in compliance with Minute 242 of the Treaty. Reclamation has constructed water delivery systems in the United States, added storage on the Colorado River, and developed salinity control facilities under the Colorado River Basin Salinity Control Project - Title I to meet the United States' obligations under Minute 242. These facilities and programs permit Reclamation to maintain acceptable salinity levels in the water supplies delivered to Mexico, including the collection and analysis of data and reporting of salinity compliance. Continues efforts to provide replacement waters for the flow in the bypass drain (which are not counted as part of the 1.5 million af of water required under the Treaty). Continues operation of portions of the YDP to generate potable and fire protection water for the facility; also includes electricity, heating and air conditioning, sewage disposal, and compressed air for the facility.

\$3,301,000

Facility Maintenance and Rehabilitation - Continues collaboration with interested stakeholders to evaluate the feasibility of the YDP as a tool to stretch water supplies on the Colorado River. Continues maintenance of the YDP facility and the Water Quality Improvement Center to preserve the assets as a means to provide replacement waters under the Colorado River Basin Salinity Control Act. Continues quality assurance of maintenance activities. Continues inspections and reviews. Continues maintenance of the support systems in portions of the YDP which supply water, electricity, heating and air conditioning, sewage disposal, and compressed air for the facility.

6,251,000

Continues maintenance of the United States and Mexico sections of the bypass drain and wellfield and conveyance systems required to meet Treaty requirements with Mexico. Water from the wellfield makes up a portion of the total deliveries to Mexico. Continues replacement activities for aging groundwater wells within the 242 well field, that are no longer capable of effective or reliable operation. Continues repairs, concrete panel replacement and upgrades for aging conveyances and related structures. Continues addressing Category 2 operations and maintenance recommendations from the Review of Operations and Maintenance report for the MODE which is a key component of the drainage system for disposing of saline groundwater in compliance with the Treaty and Minute 242 in relation to repair, replacement or removal of identified canal bridges and crossings. The increase in funding continues replacement of 40 miles of canal along the MODE and removal of deteriorating structures, replaces damaged sections of line, and restores unlined sections that were damaged in the 1993 Gila River flood. Replacement of the concrete panels on the MODE will significantly improve continued operation of the facility.

5,901,000

Subtotal, Facility Maintenance and Rehabilitation

\$12,152,000

Reclamation Request

\$15,453,000

Colorado River Front Work and Levee System

LOCATION: This project is located in Mohave, La Paz, and Yuma Counties in western Arizona; Riverside, San Bernardino, and Imperial Counties in southeastern California; and Clark County in southern Nevada.

DESCRIPTION/JUSTIFICATION: The Colorado River Front Work and Levee System consists of numerous structures that provide for assured water delivery, flood control, river navigation, and wildlife habitat. This project supports the Secretary's role as water master in a manner consistent with the "Law of the River," and supports innovative methods of conserving water and meeting the need for increased water supplies in the Southwest. The project allows for the delivery of the lower Colorado River Basin supply (nine million acre-feet), used for agriculture, fish and wildlife habitat, municipal water supply in Arizona and California, and delivery of water to Mexico in compliance with the 1944 Water Treaty with Mexico. Structures in the system include levees, training structures, dredged river channels, riprap protected banklines, sediment settling basins, and dredged backwater areas that were created as habitat mitigation in perpetuity. The newest structure added to the system is the Warren H. Brock Reservoir (Brock Reservoir) completed in FY 2011. The Brock Reservoir provides storage to conserve system water.

AUTHORIZATION: P.L. 68-585, Colorado River Front Work and Levee System Adjacent to Yuma Project, March 3, 1925; P.L. 69-560, Colorado River Front Work and Levee System, January 21, 1927; P.L. 76-697, Amend Colorado River Front Work and Levee System Act, July 1, 1940; P.L. 79-469, Amend Colorado River Front Work and Levee System Act, June 28, 1946; P.L. 85-389, Amend Colorado River Front Work and Levee System Act, May 1, 1958; P.L. 99-450, Colorado River Floodway Protection Act, October 8, 1986; and Section 396 of P.L. 109-432, Tax Relief and Health Care Act of 2006, December 20, 2006.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$2,303,000	\$2,303,000
Enacted/Request	\$2,303,000	\$2,303,000
Non-Federal	0	0
Prior Year Funds	4,411	0
Total Program	2,307,411	\$2,303,000
Prior Year Funds/Non-Federal	(4,411)	(0)
Total Reclamation Allotment	\$2,303,000	\$2,303,000

Total Cost Information

	Total Estimated Cost	Total to 9/30/15	FY 2016 Enacted	FY 2017 President's Budget	Balance to Complete
Reclamation	\$162,448,000	\$142,198,664	\$2,303,000	\$2,303,000	\$15,643,336
Adjustments 1/	142,791,000	142,791,000	0	0	0
Total	\$305,239,000	\$284,989,664	\$2,303,000	\$2,303,000	\$15,643,336

¹/ Adjustments include contributions of \$1,400,000 from the State of California for channel riparian restoration and contributions of \$141,391,000 from Southern Nevada Water Authority for the Brock Reservoir. An agreement between Southern Nevada Water Authority and Reclamation was signed in December 2007, relating to the construction phase. An agreement between Imperial Irrigation District and Reclamation was signed July 5, 2012, relating to the operations and maintenance resulting in contributions in the amount of \$7,400,000 being transferred in FY 2012 from the construction phase to cover operation and maintenance under the Yuma Area Projects program.

APPROPRIATION CEILING: None.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Reclamation's management of the Colorado River Channel is consistently challenged by seasonal rains. These localized and heavy storms turn desert washes into swiftly moving streams that deposit large amounts of sand into the river. These "wash fans" change the flow dynamics of the river, causing it to erode opposing banklines and destroy structures and prime agricultural lands. Continues efforts to identify and construct bankline projects aimed at mitigating the force of desert washes affecting the Colorado River, and providing for more control of the river channel and protection of structures which reduces annual repairs and sediment removal operations. This effort fulfills regulatory requirements for keeping the waterways open and safe for boat travel and public use. Reclamation will also focus on the results of the most current Review of Operations and Maintenance river examination and continue preparing the environmental documentation required for any new projects identified along the river.

Continues work to improve or reconstruct aging water conveyance system structures. Continues work to conduct monitoring and evaluation of structures, sediment transport, and river flow in the system. Continues activities to develop engineering designs, complete environmental compliance and construct structures.

Reclamation Request

\$2,303,000

Colorado River Water Quality Improvement Program

LOCATION: This program is located in the Colorado River Basin (Basin) upstream of Imperial Dam in the States of Arizona, California, and Nevada in the Lower Colorado Region.

DESCRIPTION/JUSTIFICATION: The purpose of this program is to support Reclamation's responsibilities under the Colorado River Salinity Control Program, and to develop a comprehensive, cost-effective program for water quality improvement and protection from salinity and other contaminants by conducting a program of monitoring and investigations for controlling the presence of chemical and biological contaminants in cooperation with the Basin States and other Federal agencies.

The Colorado River is the major source of water for the southwestern United States and northwestern Mexico. Salinity and other contaminants in the river cause an estimated \$750 million per year in damages to domestic, industrial, and agricultural users. Reclamation is involved in the program because of its vast ownership of saline lands in the Basin and its operational responsibilities as water master of the Colorado River. As such, Reclamation is the lead Federal agency for investigating and planning salinity control measures.

Additionally, as populations in the Basin increase, concentrations of residual pharmaceuticals, fertilizers, pesticides, and personal care products in wastewater are increasingly impacting the quality of limited water supplies in the Lower Colorado River. Lake Mead and all Colorado River reservoirs downstream became infested with invasive quagga mussels (Dreissena bugensis) in approximately 2006, and the long-term effects of their successful occupation may be creating ecosystem shifts toward less desirable phytoplankton communities that can impact the entire food web in all of these reservoirs. Global climate change is creating warmer year-round water temperatures in the Colorado River and its reservoirs, which also favors less desirable phytoplankton, several species of which are toxic to fish, wildlife, and humans who may consume its water prior to municipal treatment. Because prevention is much more cost effective than treatment after invasive species, salt, and anthropogenic contaminants enter the river system, Reclamation conducts quarterly monitoring of the Las Vegas Wash (a Salinity Control Unit) and of Lake Mead, and annually monitors the salinity of the Palo Verde Irrigation District's agricultural drains during the winter outage. Reclamation also conducts a biannual evaluation of effects from salt and contaminants of emerging concern on the Lower Colorado River from Hoover Dam to the Northerly International Boundary with Mexico.

AUTHORIZATION: P.L. 93-320, Colorado River Basin Salinity Control Act, June 24, 1974; P.L. 98-569, Colorado River Basin Salinity Control Act Amendment, October 30, 1984; P.L. 104-298, Water Desalination Act, August 1, 1996, and the Federal Water Pollution Control Act, June 9, 1972, 33 U.S.C. 1160.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–FY 2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$240,000	\$240,000
Enacted/Request	\$240,000	\$240,000
Non-Federal Funds	0	0
Prior Year Funds	921	0
Total Program	\$240,921	\$240,000
Prior Year Funds/Non-Federal	(921)	(0)
Total Reclamation Allotment	\$240,000	\$240,000

Total Cost Information*

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation	\$15,500,000	\$10,976,087	\$240,000	\$240,000	\$4,043,913
Adjustments	198,808	198,808	0	0	0
Total	\$15,698,808	\$11,174,895	\$240,000	\$240,000	\$4,043,913

^{*}Includes costs associated with the authorized appropriation ceiling.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues monitoring of salinity concentrations and other water quality contaminants in Lake Mead, the Las Vegas Wash, Palo Verde Irrigation District drains, and selected locations along the Lower Colorado River between Hoover Dam and the Northerly International Boundary with Mexico. Also seeks to understand possible ecosystem shifts occurring due to quagga mussel invasion and warmer winter temperatures in Lake Mead by monitoring algal communities and by detecting presence of algal toxins during times of uncontrolled algal growth. Continues data gathering and preparation of annual reports that are shared with local, State, and Federal entities that have an interest in salinity and other water quality data associated with the lower Colorado River. These data are included in a regional database for use by other governmental and non-governmental agencies, providing management with a valuable long-term record of water quality to chart trends and changes on the lower Colorado River. Continues to conduct program verification, monitoring, evaluation, and coordination activities with Colorado River stakeholders such as City, State, Tribal, and other Federal agencies. Provides representation on the Lake Mead Water Quality Forum.

Reclamation Request \$240,000

Endangered Species Conservation/Recovery Project

LOCATION: Projects are located at various sites within the Region in Arizona, southern California, and southern Nevada.

DESCRIPTION/JUSTIFICATION: This program provides for the development and implementation of projects for the stewardship of endangered, threatened, proposed, and candidate species that are resident or migratory to habitats within the Region. The principal threatened and endangered species include the southwestern willow flycatcher, yellow-billed cuckoo, Yuma Ridgway's rail, razorback sucker, Virgin River chub, bonytail chub, woundfin minnow, southern steelhead, Santa Ana sucker, desert tortoise, and the Little Colorado River spinedace. Other species include those that were proposed for listing by the U.S. Fish and Wildlife Service (FWS) like the flat-tailed horned lizard. The sonorran desert tortoise has a Candidate Conservation Agreement for which Reclamation is signatory. Specific activities include; the continued monitoring of refugia for endangered fishes on the Lower San Pedro River Preserve, several projects for the benefit of endangered fish species on the Virgin and Colorado Rivers, nestwatch programs for the bald eagle in central Arizona, and surveys for listed birds on Reclamation properties.

AUTHORIZATION: P.L. 93-205, Endangered Species Act (ESA) of 1973, December 28, 1973, as amended.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species (T&E) recovery activities

implemented.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Fish and Wildlife Management and Development	\$708,000	\$708,000
Enacted/Request	\$708,000	\$708,000
Non-Federal	0	0
Prior Year Funds	896	0
Total Program	\$708,896	\$708,000
Prior Year Funds/Non-Federal	(896)	(0)
Total Reclamation Allotment	\$708,000	\$708,000

Total Cost Information

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation	N/A	\$32,322,975	\$708,000	\$708,000	N/A
Total	N/A	\$32,322,975	\$708,000	\$708,000	N/A

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development -

Endangered Species Activities & Program Administration - Continues work on outreach programs at all area offices to conduct initial investigations into endangered species conservation and recovery projects with Federal, non-Federal, and State agencies. Continues regional endangered species coordination and management activities. Coordinates with FWS and comments on proposed ESA regulations that may impact Reclamation's mission.

\$248,000

<u>Arizona Bald Eagle Conservation Activities</u> - Continues annual winter flights and occupancy, reproductive assessment, helicopter surveys, nestwatch activities, and participation on the Southwestern Bald Eagle Management Committee. Reclamation continues to support the implementation of the Arizona Bald Eagle Conservation Strategy and will serve to offset future project related impacts.

164,000

Flat Tailed Horned Lizard Study - Continues field data collection in accordance with the Flat Tailed Horned Lizard Rangewide Management Study. Specific data include surveys to determine population and distribution in both designated management areas and known occupied habitat. This data serves to provide guidance for the conservation and management of sufficient habitat to maintain existing populations of the lizards.

60,000

Riparian Birds Habitat - Continues work on activities that would protect and create new habitat for the benefit of the southwestern willow flycatcher, yellow-billed cuckoo, and Yuma Ridgway's rail along the lower Colorado River, Gila River and San Pedro River's migratory route. Activities would consist of protecting and enhancing existing habitats and creating new habitat areas for these species. Funding would be used to establish native riparian, wetland and aquatic areas, in addition to providing educational programs that protect these habitats. Reclamation has been a long term partner in the Arizona Bird Conservation Initiative with Arizona Game and Fish, and all other statewide Federal agencies in determining which species and habitats are of greatest conservation need and working toward conservation actions on a global scale with Partners in Flight.

<u>Virgin River Endangered Fishes</u> - Continues activities on the Virgin River, in cooperation with State and Federal agencies, to reduce predation by non-native fishes on the endangered fish in the river. Reclamation currently participates on the Virgin River Fishes Recovery Team. Work includes participation in cooperative meetings, habitat improvement, conservation and recovery efforts, and habitat and population assessments.

<u>Little Colorado River Spinedace (Spinedace) Conservation and Recovery</u> - Continues work on implementation of conservation actions due to the Spinedace and other aquatic species being listed as endangered and threatened by the FWS. The Spinedace is currently restricted to north flowing tributaries of the Little Colorado River. Work includes preliminary surveys to identify locations and feasibility of fish barriers. Funding may also be used for management of the northern Mexican gartersnake and the narrowheaded gartersnake.

68,000

Reclamation Request

\$708,000

Lake Mead/Las Vegas Wash Program

LOCATION: This project is located in Clark County, Nevada.

DESCRIPTION/JUSTIFICATION: The program develops and implements a management strategy to improve water quality, reduce sediment transport, and perform habitat restoration in the Las Vegas Wash (Wash). The Wash is a critical element in the overall environmental and water resource challenge facing southern Nevada. Approximately 25 percent of the Wash is managed by Reclamation.

Historically, the Wash was an intermittent source of water in the dry Mojave Desert, but increasing flows of treated wastewater and urban runoff from the Las Vegas area transformed it into a perennial system. During the 1970s, the Wash watered about 2,000 acres of wetlands and provided habitat for birds, mammals, reptiles, and fish. Today, nearly 200 million gallons of water move through the Wash each day, an amount which can dramatically increase during floods. The resulting erosion has carved the banks of the Wash, destabilized the channel, and increased sedimentation in Lake Mead. Over the years, it is estimated that 11 million cubic yards of sediment and more than 1,700 acres of wetlands have been lost due to erosion.

A critical issue is the Wash's discharge into Lake Mead, which provides water for Arizona, California, Nevada, and several Native American Tribes. Reclamation has a vested interest in protecting the lake's water quality as much as possible as the lake regulates and protects the delivery of water to those entities. In the late 1990s, a coordination committee of 30 local, State, and Federal agencies and citizens prepared the Las Vegas Wash Comprehensive Adaptive Management Plan (CAMP). The CAMP includes 44 specific action items related to water quality, habitat management, erosion control, and other issues. In 2000, Congress enacted legislation supporting the CAMP by directing Reclamation, through the Department of the Interior, to participate in implementing the Las Vegas Wash Restoration and Lake Mead Water Quality Improvement Project.

AUTHORIZATION: P.L. 106-541, Water Resources Development Act of 2000, December 11, 2000; P.L. 109-103, Energy and Water Development Appropriations Act, 2006, Section 115, November 19, 2005; P.L. 110-161, Consolidated Appropriations Act, 2008, Division C, Section 206, December 26, 2007; and H.R. 2055, Consolidated Appropriations Act, 2012, Division B, Section 203, December 23, 2011.

COMPLETION DATA: Reclamation continues to assist in erosion control, revegetation efforts, scientific studies, and biological restoration activities. To date, 19 of the planned 21 erosion control structures (weirs) have been implemented to reduce erosion, minimize flood damage, and provide a stable platform for native vegetation. The number of weirs planned has decreased from 22 to 21 as a result of further engineering investigation of designs and further improvements. Reclamation has fortified 11 miles of shoreline with riprap to prevent further channel widening and soil loss and funded studies that indicate water quality in the Wash has improved each year. Total sediment loads have been reduced by almost 90 percent. As of September 30, 2015, this project will be 71 percent complete.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$700,000	\$700,000
Enacted/Request	\$700,000	\$700,000
Non-Federal	0	0
Prior Year Funds	814	0
Total Program	\$700,814	\$700,000
Prior Year Funds/Non-Federal	(814)	0
Total Reclamation Allotment	\$700,000	\$700,000

Total Cost Information

	Total Estimated	Total to			Balance to
	Cost	9/30/15	FY 2016	FY 2017	Complete
Reclamation 1/	\$30,000,000	\$21,632,306	\$700,000	\$700,000	\$6,967,694
Adjustments 2/	42,969,680	42,969,680	0	0	0
Total	\$72,969,680	\$64,601,986	\$700,000	\$700,000	\$6,967,694

¹/ A ceiling increase in the amount of \$10,000,000 was requested and approved. The \$30,000,000 listed in the total estimated cost is the new ceiling limitation.

APPROPRIATION CEILING: P.L. 109-103, Energy and Water Development Appropriations Act, 2006, Section 115, November 19, 2005, increased the appropriation ceiling from \$10,000,000 to \$20,000,000. H.R. 2055, Consolidated Energy and Water Development Appropriations Act, 2012, Division B, Section 203, December 23, 2011, increased the appropriation ceiling from \$20,000,000 to \$30,000,000. The comparable Federal obligation is \$30,000,000.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues partnerships with representatives of local, State, and Federal agencies to implement the CAMP action items. Continues bankline stabilization activities to control erosion, prevent wetland degradation, and provide habitat diversity.

Reclamation Request

\$700,000

² Includes cost-sharing from the Clark County Flood Control District, Clark County Department of Parks and Recreation, Southern Nevada Water Authority, Las Vegas Valley Water District, Clark County Sanitation District, City of Henderson, and City of Las Vegas. P.L. 106-541, Section 529, calls for a minimum of 35 percent in non-Federal cost-share.

Lower Colorado River Operations Program

LOCATION: All areas within the Lower Colorado Region boundaries.

DESCRIPTION/JUSTIFICATION: The Secretary of the Interior, acting through the Bureau of Reclamation, has the unique role of "water master" for the lower Colorado River. As water master, the Secretary has comprehensive authority to manage and operate the lower basin of the Colorado River. The Secretary's unique status for management of the lower Colorado River stems from a combination of Federal and State statutes, interstate compacts, court decisions and decrees, contracts, an international treaty with Mexico, operating criteria, and administrative decisions. Collectively, these authorities are known as the "Law of the River," which controls the allocation of water and operation of the Colorado River. Through the Lower Colorado River Operations Program (LCROP), Reclamation performs water master responsibilities on behalf of the Secretary of the Interior (Secretary). This role is based primarily on responsibilities delegated by Congress in the Boulder Canyon Project Act (Act) and specific requirements of the 2006 Consolidated Supreme Court Decree in Arizona vs. California which require the Secretary to administer and carry out functions related to the use of Colorado River water by entities in the Lower basin states of Arizona, California, and Nevada. LCROP includes river operations, water service contracting and repayment, and water accounting. The Act and subsequent water delivery contracts executed since the effective date of the Act (June 25, 1929) provide that there shall be no charge for the delivery of Colorado River water in the Lower Basin; therefore, Federal appropriations are required to carry out the water master responsibilities.

The program also includes work resulting from Endangered Species Act (ESA) consultations and compliance with environmental statutes such as the National Environmental Policy Act (NEPA). On April 4, 2005, the Secretary and the non-Federal partners signed program documents to implement the Lower Colorado River Multi-Species Conservation Program (MSCP). The U.S. Fish and Wildlife Service issued a Biological Opinion and Permit resulting from Sections 7 and 10 consultations providing long-term (50 years) compliance for flow and non-flow covered activities in the historical flood plain of the lower Colorado River from Lake Mead to the southerly International Boundary with Mexico. The MSCP provides compliance for 26 State and Federal special status species (seven federally listed species). Implementation of this program will include the spawning and rearing of an estimated 1.3 million native fish, creating over 8,100 acres of habitat (cottonwood-willow, mesquite, marsh, and backwaters), and associated monitoring, protection, and enhancement of existing habitat.

AUTHORIZATION: P.L. 57-191, Reclamation Act of 1902, Titles I and III, June 17, 1902, as amended; P.L. 68-585, Colorado River Front Work and Levee System and amendments, March 3, 1925; P.L. 70-642, Boulder Canyon Project Act, December 21, 1928; P.L. 73-121, Fish and Wildlife Coordination Act, March 10, 1934; the 1944 Mexican Water Treaty; the Colorado Compact of 1922; the 2006 Consolidated Supreme Court Decree - *Arizona v. California*; P.L. 90-537, the Colorado River Basin Project Act, September 30, 1968; P.L. 93-205, the Endangered Species Conservation Act, December 28, 1973, as amended; P.L. 111-11, Omnibus Public Land Management Act of 2009, March 20, 2009; P.L. 93-320, Colorado River Basin Salinity Control Act of June 24, 1974, Titles I and II, as amended; P.L. 102-575, Reclamation Wastewater and Groundwater Study and Facilities Act of 1992, Title XVI, Sec. 1603 and 1605, October 30, 1992, as amended; and P.L. 111-11, Secure Water Act, Sec. 9504, Water Management Improvement, March 30, 2009.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for Fiscal Years 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$11,694,000	\$10,582,000
Fish and Wildlife Management and Development	16,651,000	16,851,000
Enacted/Request	\$28,345,000	\$27,433,000
Non-Federal	16,651,000	16,851,000
Prior Year Funds	1,752,410	0
Total Program	\$46,748,410	\$44,284,000
Prior Year Funds/Non-Federal	(18,403,410)	(16,851,000)
Total Reclamation Allotment	\$28,345,000	\$27,433,000

OTHER INFORMATION: On April 4, 2005, entities in the states of Arizona, California, and Nevada signed documents to share the cost of implementing the MSCP on a 50/50 Federal/non-Federal basis. This commitment by the partners will result in a contribution of over \$313 million (2003 dollars) during the life of the program. Goals for the first 15 years of the program include the establishment of 2,500 acres of cottonwood-willow habitat, 700 acres of mesquite, 350 acres of marsh habitat, and 180 acres of backwaters. In addition, approximately 180,000 razorback sucker and 120,000 bonytail chub may be stocked. The program also requires an extensive research and monitoring program. Total Federal cost-share is estimated to be almost \$200 million for the first 15 years of the program.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

Administration of the lower Colorado River - Continues development of the Annual Operating Plan for Colorado River reservoirs, management and oversight of the Long Range Operating Criteria for Colorado River Reservoirs, and administration of Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Mead and Powell (based upon 2007 Interim Guidelines). Continues hydrology studies, development and maintenance of Colorado River hydrologic models and data bases, including support of telemetered data collection for real-time water use monitoring and forecasting, flood control reviews, and analysis of Colorado River and reservoir operations. Continues development and review of policies to address contemporary issues facing lower Colorado River stakeholders, studies of the river's operation and impact on Central Arizona Project operations, and generally fulfilling the requirements of the Secretary's role as water master. Continues operation and maintenance of boats to inspect dams and facilities on the Colorado River. Provides and maintains necessary buildings and facilities for the administration of the lower Colorado River. Continues operational compliance with requirements promulgated by Biological Opinions or NEPA compliance documents. Continues work with the Basin States and Mexico through the International Boundary and Water Commission (IBWC) regarding Colorado River issues. Continues outreach to a diverse group of

stakeholders impacted by the worst drought in over 100 years of record keeping who are facing a significant probability of the first shortage in the Lower basin with its attendant impacts. Includes costs to administer the System Conservation Pilot Project. Continues activities building on recommendations made during previous phases of the Colorado River Basin Moving Forward Effort. Using a phased approach, groups representing Federal, State, tribal, agricultural, municipal, hydropower, environmental, and recreational interests are engaged in a coordinated way to examine in more detail both the water imbalance challenges and potential water management actions that would help address those challenges.

5.777.000

<u>Water Contract Administration</u> - Continues implementation of the Colorado River Water Delivery Agreement to ensure California stays within its annual apportionment of 4.4 million acre-feet of Colorado River water. Continues negotiation, development, execution, and administration of Colorado River water delivery contracts under Section 5 of the Act and administration of water entitlements. Processes requests for water transfers from contractors. Assesses economic impacts resulting from changes in Colorado River system operations. Maintains a geographic information system database for contract service areas and waters within the Lower Basin. Administers policy for unlawful use of water from the lower Colorado River including taking necessary action to reduce or eliminate the unlawful use of water.

Water Accounting - Continues the production of the annual accounting report of Colorado River diversions, returns, and consumptive use required by the Consolidated Supreme Court Decree in Arizona v. California. Continues water accounting activities required for delivery of water to Mexico. Continues the maintenance of water accounting records required under the Colorado River Water Delivery Agreement, interstate water banking accounts under Storage and Interstate Release Agreements, and water accounting records associated with the inadvertent overrun and payback policy. Approves annual water orders from Colorado River entitlement holders through administration of the 43 CFR 417 (reasonable & beneficial use) regulations. Continues to conduct a well inventory along the lower Colorado River to identify unauthorized users of Colorado River water. Continues the development and use of techniques for calculation of consumptive use by water users and irrigation districts along the main stem of the Colorado River for verification of water use and estimating unmeasured return flows. Develops and implements accounting and verification procedures required by the 2007 Interim Guidelines as they relate to the creation and delivery of Intentionally Created Surplus credits. Develops policy related to lower Colorado River water accounting issues. Continues the development of data for the consumptive uses and losses report for the Lower Colorado River Basin. 2,588,000

Bi-National Activity — Minute 319 Implementation/Monitoring - On November 20, 2012, the U.S. and Mexico signed the Minute 319 (Minute) to the 1944 Treaty with Mexico; a historic bi-national agreement to guide future management of the Colorado River through 2017. The agreement was developed and facilitated by the U.S. and Mexican Sections of International Boundary and Water Commission (IBWC). The Minute established a historic operational agreement with Mexico on the Colorado River to protect against drought, enhance riparian and environmental resources, conserve endangered species, and explore potential new water source projects. Successful implementation of the Minute is critical to long-term cooperation with Mexico. Key components of the Minute include operational elements regarding the distribution of Mexico's water allotment under both low and high reservoir conditions and a pilot program to improve infrastructure and develop water conservation projects in Mexico, deliver base and pulse flows to the Lower Colorado River Limitrophe and its Associated Delta area to benefit the riparian ecosystem, and develop and test water exchange mechanisms in consideration of infrastructure investments. Funding provides for continued oversite and management of the Minute, including salaries and travel costs for Reclamation representatives to meet with their counterparts from Mexico and the IBWC to oversee implementation of the unique elements of the Minute. Activities include a pilot canal

lining project, environmental restoration, potential new canal turnout, planning for a desalination project, water accounting requirements, pulse flows for environmental restoration, and efforts associated with the final

principal engineer's report due FY 2019. The funding decrease is due to Reclamation's fulfillment of the Minute 319 Treaty commitment of \$8 million. 800,000

Other Activities - Continues to maintain and develop mission-essential water resources core competencies and capabilities, key to a multitude of cooperative planning efforts, program developments, and active participation on various teams to develop new water resources initiatives. Continues to provide Reclamation stakeholders with long-term value-added solutions to mounting water resources challenges and the threat of climate change.

741,000

Subtotal, Water and Energy Management and Development

10,582,000

Fish and Wildlife Management and Development -

<u>Lower Colorado River Multi-Species Conservation Program</u> - Continues implementation of the MSCP, which provides long-term ESA compliance for both current and future water delivery and diversion, and power production by both the U.S. and its water users. The program will provide quality habitat to conserve populations of 26 species, including the federally endangered razorback sucker, bonytail chub, southwestern willow flycatcher, yellow-billed cuckoo, and Yuma clapper rail.

Fish Augmentation - Augmenting the populations of razorback sucker and bonytail chub is a major component of the MSCP. The long term goal of the augmentation program is to provide a total of 660,000 razorback suckers and 620,000 bonytail chub for reintroduction into the lower Colorado River. The program has three primary work areas: (1) Acquire 40,000-50,000 fish larvae annually for grow-out; (2) Develop and maintain facilities to grow-out the native fish; and (3) Rear 12,000 razorback suckers and 8,000 bonytail chub annually to target size and stock into the MSCP project areas. These population augmentations will provide the nucleus for stable populations, reverse the declining trend in existing abundance, create opportunities for subsequent species research, and management, provide significant benefits related to the effects of the covered activities, and contribute to addressing other threats. Costs increased due to the development of a Native Fish Database

2,952,000

Species Research and System Monitoring - Species research provides the necessary information required to create and manage MSCP covered species and their habitats. Work tasks focus on identifying known covered species life requisites and habitat requirements, identifying knowledge deficiencies, and obtaining information to address these deficiencies to insure successful establishment and management of created habitats through conservation area development and management. System monitoring focuses on collecting data on MSCP covered species populations and habitats throughout the entire lower Colorado River ecosystem. Data collected through system monitoring allows the MSCP to evaluate the effects of conservation measure implementation on covered species populations. This data is integral to the adaptive management of habitats created by the MSCP. Costs increased due to the development of Ecological Models for 26 species and the development and testing of Electronic Field Data Collection Methods.

<u>Conservation Area Development and Management</u> - The long-term goal of the MSCP is the establishment and maintenance of over 8,100 acres of native cottonwood-willow, marsh, and backwater habitat. To meet the long-term goals of conservation area development and management, work proposed is included in one of the following four categories: (1) Conducting applied research directed at establishing cost effective methods to develop and maintain habitat;

(2) Creating habitats in accordance with the Habitat Conservation Plan; (3) Providing operation and maintenance of existing conservation areas; and (4) Conducting miscellaneous tasks required to implement the MSCP in an effective manner. Funding continues for the establishment and management of cottonwood-willow habitat at 11 conservation areas including Palo Verde Ecological Reserve, Cibola Valley Conservation Area, Cibola National Refuge. Costs decreased due to the completion of the Laguna Division Conservation Area. 14,004,000

Post-Development Monitoring - Post-development monitoring requires extensive examination of created habitats which is necessary to evaluate implementation and effectiveness of designed habitat creation projects. Data collected to accomplish pre-development monitoring of proposed projects will be conducted to document baseline conditions prior to project implementation. After habitat creation has been initiated, post-development monitoring for biotic (vegetation) and abiotic (e.g., soil moisture) habitat characteristics will be conducted to document successful implementation and to record succession change within the restored areas. The increase is due to the post-development monitoring required in FY 2017 for over 4,600 acres of created habitat. Changes in habitat quality over time, in conjunction with covered species monitoring, will drive post-development monitoring activities. 1.968.000

Adaptive Management Program - The MSCP adaptive management process is intended to be a flexible, interactive approach to long-term habitat creation and management of biological resources and will be influenced over time by the results of ongoing monitoring, research, and other sources of information. The adaptive management program will address uncertainties encountered throughout program implementation. Focus will be given to gauging the effectiveness of existing conservation measures, proposing alternative or modified conservation measures as needed, and addressing changed or unforeseen circumstances. Specific activities associated with adaptive management include: develop and implement a database management system, yearly production of an annual work plan and budget issued to all stakeholders, public outreach involving concerned stakeholders along the lower Colorado River, funding for the existing habitat maintenance program, and continued implementation of a peer-reviewed science strategy ensuring project accomplishments. Costs increased due to the inclusion of legacy data in the database management system. 1,968,000

Administration - Program administration provides senior support and administrative support to manage implementation year number twelve of the MSCP. Long-term goals include management and supervision to ensure the program is implemented in a cost-efficient, effective, and transparent manner, while achieving the requirements of the Habitat Conservation Plan. Provides and maintains necessary buildings, facilities, and support services for implementation staff. Costs increased due to increased staffing needs and salary adjustments.

2,314,000

Total, Lower Colorado River Multi-Species Conservation Program 33,702,000 Non-Federal: Various (16,851,000)

16,851,000

Subtotal, Fish and Wildlife Management and Development

\$16,851,000

Reclamation Request

\$27,433,000

Parker-Davis Project

LOCATION: This project is located in western Arizona, southern California, and southern Nevada.

DESCRIPTION/JUSTIFICATION: The Parker-Davis Project consists of Parker and Davis Dams, Lakes Havasu and Mohave, and two powerplants. The lakes have a combined storage capacity of 2,466,300 acre-feet and provide flood control, recreation, and fish and wildlife benefits. The two powerplants, with an annual power generation of approximately 2.75 billion kilowatt-hours of low-cost, renewable hydropower, serve various sectors of the southwest.

Funds are provided by Metropolitan Water District for approximately 50 percent of Parker Dam and powerplant costs. All remaining funds necessary to operate and maintain the project are provided by the power customers.

AUTHORIZATION: P.L. 74-409, Rivers and Harbors Act of 1935, August 30, 1935; P.L. 76-260, Reclamation Project Act of 1939, August 4, 1939 (authorized by the Secretary April 26, 1941); P.L. 83-373, Consolidate Parker Dam Power Project and Davis Dam, May 28, 1954; and P.L. 95-91, The Department of Energy Organization Act, August 4, 1977, P.L. 109-58, Energy Policy Act of 2005.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Mission Areas: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Performance Measure: Percent of time BOR hydroelectric generating units are available to the inter-

connected western electrical system during daily peak demand periods

SUMMARIZED FINANCIAL DATA

Program Financial Data

1 Togram I manetar Bata	FY 2016	FY 2017
Activity	Enacted	President's Request
Request	\$0	\$0
Non-Federal	14,981,000	15,297,000
Total Program	\$14,981,000	\$15,297,000
Non-Federal	(14,981,000)	(15,297,000)
Total Reclamation Allotment	\$0	\$0

WORK PROPOSED FOR FY 2017:

Facility Operations - Continues regular operations, including security costs for the hydroelectric power and water delivery facilities. \$10,647,000

Facility Maintenance and Rehabilitation - Completes installation of the Main Station Transformer Cooling Fan at Parker Dam to provide additional cooling for the transformer units to extend the life of the equipment. Continues replacement of original transformer at Davis Dam to reduce the possibility of transformer damage or generator failure. Provides installation of generator heat exchangers at Parker and Davis Dams to reduce the potential of forced outages.

4,650,000

Non-Federal - Metropolitan Water District and power customers

(\$15,297,000)

Reclamation Request

\$0

Salt River Project

LOCATION: The Salt River Project is located near Phoenix in central Arizona.

DESCRIPTION/JUSTIFICATION: The project includes an area of about 250,000 acres. The land within the project receives its irrigation water supply from the Salt and Verde Rivers and 248 pumping units for wells. About 24,715 acres receive supplemental irrigation water. The rivers are controlled by six storage dams. Four of the storage dams have hydroelectric facilities. A diversion dam serves 1,259 miles of canals, laterals, and ditches, of which 842 miles are lined and piped. The project is operated and maintained by the Salt River Agricultural Improvement and Power District and Salt River Valley Water User's Association under several repayment and operating agreements, including the June 25, 1904 agreement, the August 30, 1910 agreement for the cross cut canal and power plant, and the September 6, 1917 agreement and amendments. Project facilities and most of the lands are Reclamation-owned. Title XXVIII of the Reclamation Projects Authorization and Adjustments Act (P.L. 102-575) permits Reclamation to cost-share with non-Federal management entities on the development, rehabilitation, and expansion of recreation and fish and wildlife areas and facilities on Reclamation projects. The partnerships continue the efficient management of Reclamation lands for the benefit of the public. Along with local supporters for recreation improvements, such as the public trail system, Reclamation is currently partnered with three cities (Phoenix, Tempe, and Scottsdale) and the Salt River Project. A provision of P.L. 108-451, Title II, the Gila River Indian Community Water Rights Settlement Act of 2004, provides that the title of the C.C. Cragin (formerly Blue Ridge) Dam and Reservoir has been transferred to the Federal government to benefit the Salt River Project.

AUTHORIZATION: The Reclamation Act of June 17, 1902 (authorized by the Secretary on March 14, 1903); Rehabilitation and Betterment Act, October 7, 1949 as amended; P.L. 89-72, Federal Water Project Recreation Act of 1965, July 9, 1965 as amended by the Reclamation Recreation Management Act, Title XXVIII of P.L. 102-575, October 30, 1992; P.L. 108-451, The Arizona Water Settlement Act, Title II, Gila River Indian Community Water Rights Settlement Act of 2004, December 10, 2004; P.L. 93-320, Colorado River Basin Salinity Control Act of June 23, 1974, Title I, as amended; and P.L. 109-110, Title II, Verde River Partnership.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the

Facility Reliability Rating.

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$100,000	\$100,000
Land Management and Development	549,000	549,000
Facility Operations	63,000	63,000
Facility Maintenance and Rehabilitation	187,000	187,000
Enacted/Request	\$899,000	\$899,000
Non-Federal	293,000	207,000
Prior Year Funds	22,056	0
Total Program	\$1,214,056	\$1,106,000
Prior Year Funds/Non-Federal	(315,056)	(207,000)
Total Reclamation Allotment	\$899,000	\$899,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development

<u>Verde River Water Resources Study</u> - The Plan of Study will focus on examining a full range of problems associated with water quantity and water quality and developing a set of proposed alternatives that meet the needs and criteria set forth by the partnership. Continues to explore collaborative and science-based initiatives with the Verde River Basin Partnership issues in the Verde River Basin that address water supply and demand. (FY 2007 - FY 2021)

Subtotal, Water and Energy Management and Development

\$100,000

Land Management and Development - Continues land resource management activities such as responding to right-of-way and easement issues; administering contracts, leases, and permits; survey of withdrawn lands; and conducting land field reviews. Continues implementation of compliance activities. Continues trail access sites on Salt River Project areas in Phoenix, Tempe, Scottsdale, and Glendale. The work is done to provide a minimum level of stewardship of Federal interests in this project.

		756,000
Non-Federal:	Individual developers and municipalities	(207,000)
		549,000

Subtotal, Land Management and Development

549,000

Facility Operations - Continues oversight responsibilities and functions such as planning and conducting Emergency Action Plan field exercises, performing Emergency Action Plan reviews, performing Standard Operating Procedure reviews and updates, and conducting associated policy reviews.

Subtotal, Facility Operations

63,000

Facility Maintenance and Rehabilitation - Continues oversight responsibilities, including seven high hazard dams, approximately 1,000 miles of canals and piped laterals, and six hydroelectric power plants; including performing annual inspections, safety evaluations, participating in issue evaluations and comprehensive and periodic reviews.

Subtotal, Facility Maintenance and Rehabilitation

<u>187,000</u>

Reclamation Request

\$899,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Salton Sea Research Project

LOCATION: Imperial and Riverside Counties, California.

DESCRIPTION/JUSTIFICATION: The Salton Sea (Sea) is a terminal hypersaline (58,000 ppt), nutrient-rich lake in the Sonoran Desert of southeastern California. The Sea's source water is primarily agricultural drainage from the Imperial, Coachella, and Mexicali Valleys, with smaller contributions from municipal effluent and stormwater runoff. Annual inflow to the Sea averages about 800 thousand acrefeet per year. The Bureau of Reclamation owns approximately 90,000 acres of land in and immediately adjacent to the Sea for the primary purposes of ag-discharge. The lake covers about 376 square miles (970 km²), making it the largest lake in California. The Sea is a major resting stop for migratory and resident birds on the Pacific Flyway. Millions of migratory birds depend upon the Sea which is the only significant remaining resting/feeding/breeding area in California for these species.

A combination of decreasing water surface elevation, decreased water quality, increased salinity, and reduced future inflows due to system conservation and ag-to-urban water transfers will result in the eventual collapse of the existing fishery and associated ecosystem. This dramatic and predictable change in the existing ecosystem will adversely impact present recreational and economic values of the Sea and surrounding region. In order to successfully identify and develop the most efficient and reasonable adaptation strategies to cope with the complex problems of the Sea, a continuing program of engineering, physical and biological planning, research, and evaluation has been implemented.

Congress enacted P.L. 105-372, the Salton Sea Reclamation Act of 1998 (Act), which authorized the Secretary of the Interior, acting through Reclamation, to conduct a feasibility study on restoration options for the sea. All reporting requirements of the Act were met when the Secretary transmitted to Congress the Salton Sea Restoration Project Draft Alternative Appraisal Report prepared by Reclamation, the Draft Environmental Impact Statement/Environmental Impact Report, an Overview and Summary Report, and a Strategic Science Plan prepared by the Salton Sea Science Subcommittee. These provided a detailed description of the scope and results of scientific studies undertaken during the previous 18 months. These documents provided a menu of alternatives, associated environmental impacts, alternative cost estimates, and a summary of findings and recommendations for future management actions by stakeholders.

In January of 2003, Reclamation transmitted to Congress a Salton Sea Study Status Report which contained the most current information available on various proposals for full and partial restoration/management concepts for the Sea. This report built on the information developed and transmitted to Congress in January 2000.

In the summer of 2003, the Quantification Settlement Agreement (QSA) water transfer agreement between the Imperial Irrigation District (IID) and the San Diego County Water Authority was executed. The QSA resulted in the passage of several California laws which required the California Resources Agency (RA), through the Department of Water Resources (DWR) and the California Department of Fish and Wildlife, to complete a Salton Sea Ecosystem Restoration Study and a Programmatic Environmental Impact Report to the State Legislature by December 31, 2006. The DWR released a draft Programmatic Environmental Impact Report in October 2006, and a subsequent Final Ecosystem Restoration Study and Final Programmatic Environmental Impact Report in May 2007. The RA's preferred alternative would have been an estimated \$8.9 billion in 2007 dollars. Because of the prohibitive cost, the state did not take further action on this alternative. The RA continues to be the lead agency and works cooperatively with the DWR, Department of Fish and Wildlife, State Air Resources Board, and State Water Resources Control Board.

On October 25, 2004, Congress passed P.L. 108-361, Water Supply, Reliability and Environmental Improvement Act, which required the Secretary of the Interior, in coordination with the State of California and the Salton Sea Authority, to complete a feasibility study on a preferred alternative for the Sea's restoration by December 31, 2006. A Summary Restoration Report and supporting Comprehensive Restoration Report were finalized and released in December 2007 and January 2008, respectively. These reports present information on five action restoration alternatives and a no action alternative. Estimated cost of the alternatives ranged from \$3.5 billion to \$14 billion in 2006 dollars.

In late 2015, the RA hired a Salton Sea Executive to reinvigorate the state's Salton Sea management program, and new progress is being made. Reclamation has assigned a Salton Sea Program Manager to coordinate Reclamation's cooperation with the renewed state efforts to develop Salton Sea management concepts.

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902; P.L. 102-575, Title XI, Reclamation Projects Authorization and Adjustment Act, October 30, 1992; P.L. 105-372, Salton Sea Reclamation Act of 1998, November 12, 1998, as amended by P.L. 108-7, Energy and Water Development Appropriations Act, 2003, Section 213, February 20, 2003; and P.L. 108-361, Water Supply, Reliability and Environmental Improvement Act, October 25, 2004.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$300,000	\$300,000
Enacted/Request	\$300,000	\$300,000
Non-Federal Funds	0	0
Prior Year Funds	1,287	0
Total Program	\$301,287	\$300,000
Prior Year Funds/Non-Federal	(1,287)	0
Total Reclamation Allotment	\$300,000	\$300,000

Total Cost Information

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation 1/	\$45,000,000	\$30,623,384	\$300,000	\$300,000	\$13,776,616
Adjustments 2/	10,350,000	2,518,584	0	0	7,831,416
Total	\$55,350,000	\$33,141,968	\$300,000	\$300,000	\$21,608,032

^{1/} Includes research costs of \$10 million under P.L. 102-575; estimated feasibility costs of \$25 million under Title I of P.L. 105-372; and river reclamation and other irrigation drainage water treatment actions along the New and Alamo Rivers of \$10 million under Title II of P.L. 105-372.

OTHER INFORMATION: Section 7 of the Torres-Martinez Desert Cahuilla Indians Claims Settlements Act, 1996, states that "The United States, in its capacity as trustee for the Tribe, as well as for any affected Indian allotment owners, and their successors and assigns... shall convey to CVWD and IID a permanent flowage easement as to all Indian Trust lands (approximately 11,800 acres) located within and below the minus 220-foot contour of the Salton Sink..." and "The United States in its own right... conveys to CVWD and IID a permanent flowage easement as to all Federal lands (approximately 110,000, acres) located within and below the minus 220-foot contour of the Salton Sink...".

On September 4, 2002, the Center for Biological Diversity, Cabazon Band of Mission Indians, and the Sierra Club filed a lawsuit (Case number ED CV 02-923 RT, SGLX) in the U.S. District Court (Central District of California) alleging that Reclamation failed to comply with provisions of the Salton Sea Reclamation Act of 1998. On September 24, 2004, the court ruled in favor of the defendant, Reclamation, with a conclusion that the plaintiff(s) had not demonstrated standing. On February 27, 2014, the Department of the Interior (DOI) and Salton Sea Authority entered into a Memorandum of Understanding (MOU) for collaboration and exchange of Technical and Scientific information regarding the resources of the Salton Sea.

APPROPRIATION CEILING: The appropriation ceilings for this Project are as follows:

- Appropriations authorized under P.L. 102-575 are \$10,000,000. The comparable Federal obligation is \$10,000,000. Any future project development under this authorization would require an increase in the ceiling.
- Appropriations authorized under P.L. 105-372 (Title I) have no ceiling connected to the authorized feasibility work. The comparable Federal obligation for the feasibility work is \$25,000,000.
- P.L. 105-372 (Title II), as amended by P.L. 108-7, provides a ceiling associated with work for river reclamation and other irrigation drainage water treatment actions (New and Alamo Rivers) in the amount of \$10,000,000. This authorization is adequate to cover the river reclamation and other irrigation drainage water treatment actions as currently proposed.

² Includes cost-sharing of \$2,168,584 from the Salton Sea Authority, a joint powers authority of Imperial and Riverside counties, Imperial Irrigation District (IID) and Coachella Valley Water District (CVWD), and the Torres Martinez Tribe for research. Also includes \$350,000 from the State of California, Department of Water Resources for the feasibility study.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues coordination and exchange of technical expertise with the California Resources Agency, the Salton Sea Authority, the Torres-Martinez Desert Cahuilla Indians and other area Tribes, and other stakeholders, including IID and CVWD. Efforts will continue to monitor water quality data trends and to mitigate air quality degradation associated with changes in the Sea's surface water level.

Reclamation Request

\$300,000

San Carlos Apache Tribe Water Settlement Act

LOCATION: The San Carlos Apache Tribe reservation is located in Arizona, 100 miles east of Phoenix. The reservation consists of 1.9 million acres within Graham and Gila counties. Approximately 82 percent of the reservation is within the Upper Gila River watershed, 17 percent within the Salt River watershed, and the remaining one percent within the San Pedro River watershed.

DESCRIPTION/JUSTIFICATION: Although located in proximity to water supply sources, the San Carlos Apache Tribe has historically not been able to use these water supplies in substantial quantities due to limited water rights and lack of resources. The San Carlos Apache Tribe had rights to irrigate 1,000 acres with 6,000 acre-feet annually of Gila River water. The San Carlos Apache Tribe (Tribe) Water Rights Settlement Act of 1992 (Act) and the associated Water Settlement Agreement allocated an additional 7,300 acre-feet of Salt/Black River water and 60,665 acre-feet of Central Arizona Project (CAP) water to the Tribe. Reclamation's obligation is limited to implementation of Section 3707 of the Act which requires the Secretary to design and construct new facilities for the delivery of 12,700 acre-feet of the Tribe's CAP water.

AUTHORIZATION: P.L. 102-575 - Title XXXVII, San Carlos Apache Tribe Water Rights Settlement Act of 1992, October 30, 1992.

COMPLETION DATA: Environmental compliance for the Tribe's plans for utilizing the water made available under the Act is not scheduled at this time. If water exchanges are proposed, a biological assessment for consultation with the U.S. Fish and Wildlife Service will be required under Section 7 of the Endangered Species Act of 1973, as well as compliance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act. At this time, baseline data collection is being carried out to document the status of the endangered southwestern willow flycatcher on the Gila River downstream of Coolidge Dam. Once the project development or water leases are fully enacted, it is anticipated that Reclamation will be required to purchase water as needed to maintain minimum flows in the Gila River for critical nesting periods (late May and early June) during drought years. This is estimated to occur approximately every 10 years over an estimated 50-year project life.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21s Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$150,000	\$1,550,000
Enacted/Request	\$150,000	\$1,550,000
Other Federal ^{1/}	5,250,000	2,000,000
Prior Year Funds	1,738	0
Total Program	\$5,401,738	\$3,550,000
Prior Year Funds/Other Federal	(5,251,738)	(2,000,000)
Total Reclamation Allotment	\$150,000	\$1,550,000

¹/ An additional \$2,000,000 in funding has been requested under the Central Arizona Project, Indian Distribution Division. Funding will be provided by the Lower Colorado Basin Development Fund (LCBDF) - Arizona Water Settlements Act (AWSA) Revenues.

Total Cost Information

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation 1/	\$47,364,000	\$1,336,671	\$150,000	\$1,550,000	\$44,327,329
Total	\$47,364,000	\$1,336,671	\$150,000	\$1,550,000	\$44,327,329

¹/ Total Estimated Cost revised due to the updated October 2009 price levels applied.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation 1/	\$47,364,000	\$47,364,000
Total	\$47,364,000	\$47,364,000

¹/ Planning efforts are incomplete. The allocation may change upon completion of the planning report.

METHODOLOGY: The Separable Costs Remaining Benefits methodology of cost allocation has not been modified from last year.

APPROPRIATION CEILING: An appropriation ceiling was not included in the original authorizing legislation.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development – Commences work between the Tribe and Reclamation to plan, design, perform NEPA activities, and construct a project capable of delivering 12,700 acre-feet of allocated CAP water. Continues assessing the status of southwestern willow flycatcher and yellow-billed cuckoo on the Gila River downstream of Coolidge Dam, and monitoring dam water releases, U.S. Geological Survey gauge data, and precipitation within the watershed. The increase in funding is for costs associated with field investigation activities necessary to support project design.

3,550,000 (2,000,000)

LCBDF-AWSA Revenues

\$1,550,000

SEE APPENDIX FOR: Status of NEPA Compliance

Southern Arizona Water Rights Settlement Act Project

LOCATION: San Xavier and Schuk Toak Districts of the Tohono O'Odham Nation, Pima County, Arizona.

DESCRIPTION/ JUSTIFICATION: The Secretary of the Interior (Secretary) is required to deliver annually up to 16,000 acre-feet of water to the Schuk Toak District and 50,000 acre-feet of water to the San Xavier District of the Tohono O'Odham Nation (Nation) at no cost to the Nation or Districts. The Act established the Cooperative Fund as a source of funds for the Secretary to meet these obligations. The Bureau of Indian Affairs administers the Cooperative Fund and transfers funds to Reclamation for operational costs.

AUTHORIZATION: Southern Arizona Water Rights Settlement Act of 1982, October 12, 1982, as amended by P.L.108-451.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Facility Operations	\$0	\$0
Enacted/Request	\$0	\$0
Non-Federal	0	0
Prior Year Funds/Other Federal	5,068,000	5,270,000
Total Program	\$5,068,000	\$5,270,000
LCRBDF – AWSA Revenues	0	0
Prior Year Funds/Other Federal	(5,068,000)	(5,270,000)
Total Reclamation Allotment	\$0	\$0

WORK PROPOSED FOR FY 2017:

Facility Operations - Schuk Toak District and San Xavier Water District Delivery - Continues water delivery through the Central Arizona Project (CAP) system and performs operation, maintenance, and repair of both: the Schuk Toak pipeline that delivers water to farm land in the Schuk Toak District, and the CAP Link pipeline that delivers water to farm land in the San Xavier District. Reflects increase in cost of energy to deliver water.

Other Federal - Bureau of Indian Affairs

\$5,270,000 (5,270,000)

Reclamation Request

\$0

SEE APPENDIX FOR: Project Repayment FY 2017

Repayment of Irrigation Investment Status of Water Service and Repayment Contract

Yuma Area Projects

LOCATION: The projects are located in western Arizona, southeastern California, and southern Nevada.

DESCRIPTION/JUSTIFICATION: The projects provide for the delivery of water that sustains over 1.2 million acres of irrigable land and 1.7 million municipal users in both the United States and Mexico. Additional benefits of the projects include flood and sediment control, recreation, and fish and wildlife. Project activities include the operation and maintenance for water delivery of the Colorado River and associated facilities between Davis Dam and the Southerly International Boundary (approximately 276 river miles). Facilities in addition to the river channel include banklines, jetties, training structures, access roads, operating bridges, levees, flood ways, drainage and/or groundwater recovery wells and related carriage facilities, transmission lines and switchyard/substations, and operation and maintenance of fish and wildlife facilities. The projects provide for operations and maintenance of reservoir facilities at Imperial Dam, Laguna Dam, Senator Wash Dam, and the Senator Wash Pumping/Generating Plant. Funds for the operations and maintenance of the Warren H. Brock Reservoir (Brock Reservoir) are being provided by a group of Municipal Utilities (Metropolitan Water District of Southern California, Central Arizona Water Conservation District, and Southern Nevada Water Authority) through December 31, 2025, at which time the Federal Government will assume responsibility for the operations and maintenance of the facility.

The projects provide for environmental compliance with Federal and State regulations in support of operation and maintenance activities. The projects provide for the operation and maintenance of drainage wellfields and conveyance systems to recover and control groundwater.

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902 (Yuma Project approved by the Secretary of the Interior on May 10, 1904); P.L. 64-293, Yuma Auxiliary Project, January 25, 1917, as amended; P.L. 68-292, Second Deficiency Appropriation Act for 1924, Section 4 (The Fact Finders Act), December 5, 1924 (Gila Project approved by the President on June 21, 1937); P.L. 68-585, Colorado River Front Work and Levee System, March 3, 1925; P.L. 70-642, Boulder Canyon Project Act, December 21, 1928; P.L. 80-247, Interior Department Appropriation Act of 1948, July 30, 1947; P.L. 88-25, Delivery of Water to Mexico, May 17, 1963; P.L. 106-221, Wellton Mohawk Transfer Act, June 21, 2000; and P.L. 106-566, Conveyance to Yuma Port Authority, December 23, 2000. The projects were administratively consolidated into the Yuma Area Projects - with the approval of the appropriations committees in 1957.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscape

Performance Measure: Percent of baseline acres infested with invasive plant species that are controlled

Control Invasive Plant Species Strategic Plan Performance Measure:

In 1999, Giant Salvinia was discovered growing in portions of the Palo Verde Irrigation District (PVID) drainage system in Blythe, California and has since migrated into the lower Colorado River. Depending upon environmental conditions, this weed can double in area every two to ten days. Due to its prolific

growth rate, it is considered one of the world's worst aquatic weeds. Capable of explosive growth, Giant Salvinia reduces oxygen content, degrades water quality, and can block waterways; threatening municipal and agricultural water systems.

Reclamation, in conjunction with the PVID, the Bureau of Land Management, Department of Agriculture, and the U.S. Fish and Wildlife Service has implemented a number of strategies to reduce and control the spread of Giant Salvinia in the PVID, the lower Colorado River, associated backwaters, and at National Wildlife Refuges. The most successful approach is an annual active aquatic pesticide application. Annual surveys demonstrate these efforts have been successful in controlling the spread of Giant Salvinia but complete eradication is probably not going to occur. Reclamation and partner agencies need to continue concerted efforts to control this invasive plant to prevent it from moving downstream and becoming further established in the lower Colorado River.

SUMMARIZED FINANCIAL DATA

Program Financial Data

1 Togram T manciar Data		
	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$1,324,000	\$1,315,000
Facility Operations	6,044,000	5,885,000
Facility Maintenance and Rehabilitation	18,596,000	19,114,000
Enacted/Request	\$25,964,000	\$26,314,000
Non-Federal ^{1/}	719,000	719,000
Prior Year Funds	4,418	0
Total Program	\$26,687,418	\$27,033,000
Prior Year Funds/Non-Federal 1/	(723,418)	(719,000)
Total Reclamation Allotment	\$25,964,000	\$26,314,000

¹/ Includes the current portion of the \$7,400,000 in contributions from Southern Nevada Water Authority for the lower Colorado River's Brock Reservoir. An agreement between Imperial Irrigation District and Reclamation was signed July 5, 2012, for the purpose of operations, maintenance, repair and replacement of the Brock Reservoir, which was previously constructed under the Colorado River Front Work & Levee System program. Also, includes non-Federal contributions relating to water districts portions of grants.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues activities to develop and manage water entitlement and operation and maintenance contracts consistent with Colorado River water law in accordance with Reclamation's responsibilities under the Boulder Canyon Project Act. Continues administration of contracts, assistance to water districts for canal modernization, and on farm conservation to preserve water supplies.

\$1,465,000
Non-Federal: Various

(150,000)

<u>(150,000)</u> 1,315,000

Subtotal, Water and Energy Management and Development

\$1,315,000

Facility Operations - Continues operations of facilities including Imperial Dam, Laguna Dam, Senator Wash Dam and Brock Reservoir to provide for storage and delivery of water to districts in southern California and Arizona. Continues water accounting activities to account for water deliveries, water use, and return flows in accordance with Reclamation's responsibilities under the Boulder Canyon Project Act.

Continues operation of the drainage wells and conveyances to recover and manage groundwater levels. Continues operation of the Yuma Area Water Management System and River Telemetry systems that provide real time data to support river operations.

Continues efforts to collect and analyze sediment samples. Continues efforts to identify non-contract users of Colorado River water as a means to conserve the water supply. Continues efforts with the enhancement of hydraulic modeling to provide for evaluation of long-term effects on the Colorado River by increasing the level of accuracy in managing water releases and increased costs associated with the delivery of water.

4.124,000

Non-Federal: Southern Nevada Water Authority (57,000) 4.067.000

Continues activities to manage land along the Colorado River that is used to maintain the river and associated facilities. Activities include right-of-ways, utility crossing contracts, title transfers, lease negotiations, and management of hazardous materials. Supports the completion of land resource inventories, land records maintenance, and environmental and hazardous materials audits.

896,000

Continues compliance with Federal and State regulations for the operations and management of the Colorado River. Continues with environmental and hazardous materials activities and compliance with Environmental Management System requirements. Continues operations of fish and wildlife facilities. Continues efforts to manage invasive species within river and canal systems. Contributes to the Lower Colorado River Giant Salvinia Task Force that focuses on a broad approach to most effectively manage the species. Continues to monitor existing quagga mussel populations, and incorporate eradication and control procedures into routine operations and maintenance programs.

922,000

Subtotal, Facility Operations

\$5,885,000

Facility Maintenance and Rehabilitation - Continues maintenance of the Lower Colorado River System. Activities include maintenance of 684 miles of levee, bankline access, and canal roads; placement of riprap on deteriorating banklines, jetties, and training structures to maintain river stability; and removal of wash fan silt debris to aid in river navigation and improve river safety. Replenishes rock and gravel supplies and maintains quarries. Conducts inspections and performs minor maintenance of quarries, stockpiles, banklines, roads, river sediment deposits, and 110 bridges. The increase in funding is due to the additional amount of effort in bridge inspections and repairs, and in bankline maintenance activities.

3.190,000

Continues maintenance of drainage, wellfield, and conveyance systems. This includes sediment removal, gate and concrete repairs, and pump repairs. Continues inspections and maintenance of Imperial Dam, Laguna Dam, Senator Wash Dam, Brock Reservoir, and related structures to monitor and preserve facility reliability and safety. Continues maintenance of Yuma, Laguna, and Ehrenberg facilities including the warehouse and heavy equipment shop. Maintenance includes heating and air conditioning, electrical, structural, security, plumbing, vehicle parking, roads, storm water run-off, fire protection, and lab equipment. Continues funding maintenance and upgrade activities that are necessary for aging wellfields, which include replacement of groundwater wells within the South Gila and Yuma Valleys that are no longer capable of effective or reliable operation. Any interruption in the continuous operation of critical Reclamation wellfields results in saline groundwater levels rising to critical stages within days affecting. 90 percent of the nation's leafy vegetables produced in the Yuma area during winter months; a multibillion dollar crop. Rising aquifers also negatively impact Yuma County residents and businesses as high groundwater levels threaten building foundations, septic tanks, and underground pipelines. The increase

Yuma Area Projects

in funding is due to additional work related to replacement of undersized conveyances containing cracks that result in seepage and water loss.

13,048,000

Non-Federal: Southern Nevada Water Authority

(512,000)
12,536,000

Continues sediment control along the river and within settling basins to ensure efficient water delivery to the United States and Mexico. This activity includes surveying sediment distribution to develop specific scope of work, engineering design, disposal site determination and permitting, dredging, quality control inspections, and all necessary environmental work. If dredging is not maintained, the sediment level behind the Imperial Dam will impact river operations by reducing the hydraulic head needed to convey waters through the All-American and Gila Gravity Main Canals. The decrease in funding is due to a reduction in dredging activities necessary to address the level of sediment. 3,388,000

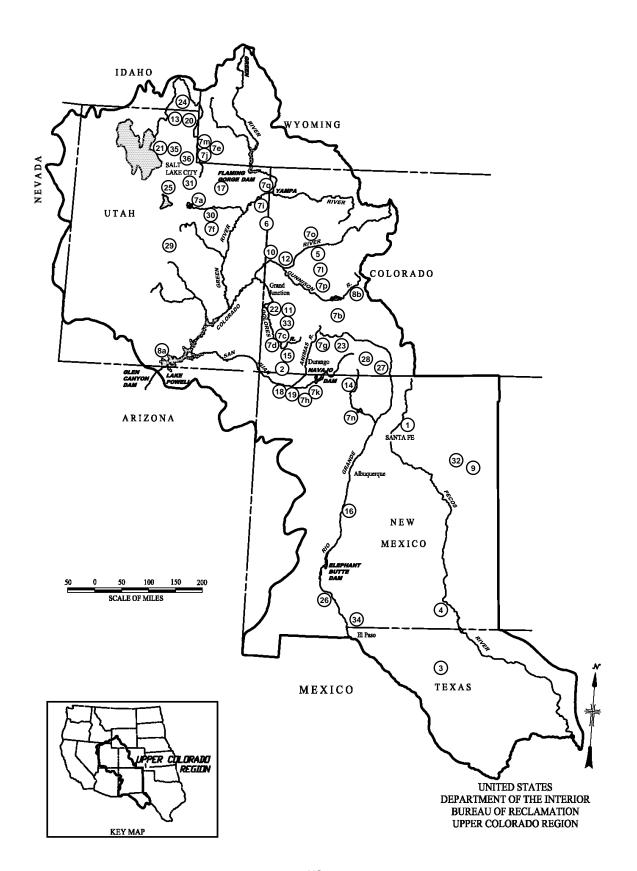
Subtotal, Facility Maintenance and Rehabilitation \$19,114,000

Reclamation Request \$26,314,000

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UPPER COLORADO (UC) REGION PROJECTS AND PROGRAMS MAP KEY

- 1. Aamodt/Taos Settlement (occupy same basic location on the map)
- 2. Animas-La Plata Project
- 3. Balmorhea Project
- 4. Carlsbad Project
- 5. Collbran Project
- 6. Colorado River Basin Salinity Control Program (CRBSCP), Title II, Basinwide
- 7. <u>Colorado River Storage Project (CRSP)</u>, Section 5, Participating Projects
 - a. Bonneville Unit, Central Utah Project
 - b. Bostwick Park Project
 - c. Dallas Creek Project
 - d. Dolores Project
 - e. Eden Project
 - f. Emery County Project
 - g. Florida Project
 - h. Hammond Project
 - i. Jensen Unit, Central Utah Project
 - j. Lyman Project
 - k. Navajo Unit (Section 5 and 8)
 - 1. Paonia Project
 - m. Seedskadee Project
 - n. San Juan Chama Project
 - o. Silt Project
 - p. Smith Fork Project
 - q. Vernal Unit, Central Utah Project
- 8. Colorado River Storage Project (CRSP),

Section 8, Participating Projects

- a. Glen Canyon Unit
- b. Wayne N. Aspinall Storage Unit
- Eastern New Mexico Water Supply Ute Reservoir
- 10. Endangered Species Recovery Implementation Program
- 11. Fruitgrowers Dam Project
- 12. Grand Valley Unit, CRBSCP, Title II
- 13. Hyrum Project
- 14. Jicarilla Apache Rural Water System
- 15. Mancos Project
- 16. Middle Rio Grande Project
- 17. Moon Lake Project
- 18. Navajo Indian Irrigation Project
- 19. Navajo Gallup Water Supply
- 20. Newton Project
- 21. Ogden River Project
- 22. Paradox Unit, CRBSCP, Title II
- 23. Pine River Project
- 24. Preston Bench
- 25. Provo River Project
- 26. Rio Grande Project
- 27. San Luis Valley Project (Closed Basin Division)

- 28. San Luis Valley Project (Conejos Division)
- 29. Sanpete Project
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- 31. Strawberry Valley Project
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Bureauwide Programs:

- a. Colorado River Water Quality Improvement Program
- b. Environmental and Interagency Coordination Activities
- c. Examination of Existing Structures
- d. General Planning Activities
- e. Land Resources Management Program
- f. Negotiation and Administration of Water Marketing
- g. Public Access and Safety Program
- h. Reclamation Law Administration
- Recreation and Fish and Wildlife Program Administration
- j. Upper Colorado River Operations Program
- k. Water Conservation Field Services Program
- Colorado River Storage Project (Initial Unit) (Too many sites to plot on this scale of map)
- m. Rio Grande Pueblos (Too many sites to plot on this scale of map)

FY 2017 Upper Colorado Region Budget Summary (\$ in thousands)									
	FY 2017								
	FY 2016	Water &	Land	Fish &	Facility	Facility	FY 2017 President's	Other Fed/	Total
Project	Enacted	Energy	Management	Wildlife	Operations	Maintenance	Budget 2/	Non-Fed	Program
Aamodt Indian Water Rights Settlements 1/	6,000								
Animas-La Plata Project	2,892	146	199	324	1,781	202	2,652		2,652
Balmorhea Project	40			27	13		40		40
Carlsbad Project	4,139	64	321	2,530	1,181	43	4,139	63	4,202
Collbran Project	1,921	109	120		1,853	107	2,189		2,189
Colorado River Basin Salinity Control Program, Title II	8,423	8,162			,		8,162	3,498	11,660
Colorado River Storage Project, Section 5	9,671	1,204	2,651	80	5,357	1,143		3,054	13,489
Colorado River Storage Project, Section 8	2,250	,	100	2,665	,	,	2,765	,	2,765
Colorado River Water Quality Improvement Program	380	380		,			380		380
Eastern New Mexico Water Supply - Ute Reservoir	47	1,000					1,000	1,500	2,500
Endangered Species Recovery Implementation Program	4,351	1,000		4,915			4,915	7	4,915
Fruitgrowers Dam Project	239	31	70	1,010	71	65	237		237
Grand Valley Unit, CRBSCP	3,209	133	127		1,646	45	1,951	627	2,578
Hyrum Project	355	30	148		128	48	354		354
Mancos Project	283	31	30		147	90	298	13	311
Middle Rio Grande Project	23,991	787	460	13,082	1,299	10,237	25,865	1,425	27,290
Moon Lake Project	95		9	. 5,552	50	34	93	_,:_0	93
Navajo-Gallup Water Supply Project 1/	89,663								, ,
Newton Project	125		29		73	22	124		124
Ogden River Project	484		218		149	107	474		474
Paradox Unit, CRBSCP	3,972	70	42	287	3,000		3,399	1,110	4,509
Pine River Project	493	15	108	_0.	243	78	444	1,110	444
Preston Bench	12		4		2.0	8			12.
Provo River Project	1,738	288	360	645	416	42	1,751	870	2,621
Rio Grande Project	7,406	380	623	396	4,005	2	5,406	483	5,889
Rio Grande Pueblos	300	300	020	000	1,000	_	300	103	300
San Luis Valley Project, Closed Basin	3,944	21	38	208	3,655	1 1	3,923		3,923
San Luis Valley Project, Conejos	56	20	3	200	40	14	77		77
Sanpete	70	60				10	70		70
Scofield Project	693	60	455	14	66	20	615		615
Strawberry Valley Project	930	134	371	1-7		100	605		605
Taos Pueblo Indian Water Rights Settlements 1/	4,048	104	0, 1						003
Tucumcari Project	26	13	5			5	23		23
Uncompangre Project	1,042	55	214	569	73	86	997		997
United States/Mexico Border Issues - Tech. Support	90	90	217	303	10	55	90		90
Upper Colorado River Operations Program	270	270					270		270
Weber Basin Project	2,122	586	549		575	350	2,060		2,060
Weber River Project	148	500	60		68	18	146		2,000
Total - Water and Related Resources	\$185,918	\$14,439	\$7,314	\$25,742	\$25,889	\$12,877	\$86,261	\$12,643	\$98,904

^{1/} For FY 2017, the Navajo-Gallup Water Supply Project, Aamodt Indian and Taos Pueblo Indian Water Rights Settlements are funded in the Indian Water Rights Settlements Account.

^{2/} Public Law 114-113, the Consolidated Appropriations Act for 2016 provided Reclamation an additional \$166.3 million in six categories including Western Drought Response (\$100.0 million), rural water (\$47.0 million), and four other categories. At the time of budget preparation, these funds had yet to be distributed by program.

UPPER COLORADO REGION FY 2017 OVERVIEW

FY 2016	FY 2	FY 2017 BUDGET FOR WATER AND RELATED RESOURCES						
Enacted	Water &	Water & Land Fish & Facility Facility Total						
	Energy	Management	Wildlife	Operations	Maintenance	Program		
\$185,918,000	\$14,439,000	\$7,314,000	\$25,742,000	\$25,889,000	\$12,877,000	\$86,261,000		

The Bureau of Reclamation Fiscal Year (FY) 2017 budget for the Upper Colorado Region for Water and Related Resources totals \$86.3 million, a decrease of \$99.7 million from 2016 enacted. The decrease is primarily due to the proposed establishment of a separate Indian Water Rights Settlement (IWRS) account to include the Navajo-Gallup Water Supply Project and the Aamodt Litigation Settlement Act in FY 2017, and the completion of the discretionary funding requirements for the Taos Indian Water Rights Settlement in FY 2016. The IWRS account section can be found later in this Budget Justification document. Excluding the IWRS projects, this budget request is an increase of \$54,000 from the 2016enacted and will provide for the continuation of current programs and maintenance.

The Region encompasses the watershed areas of the upper Colorado River, the Rio Grande from its headwaters to Amistad Reservoir in Texas, the Pecos River, and waters draining into the Great Salt Lake and other geologically created closed basins. The Region includes almost all of Utah and New Mexico, the western part of Colorado, northeastern Arizona, southwestern Wyoming, the far west corner of Texas, and small portions of Idaho and Nevada.

The authorized projects of the Region deliver an average of 4.4 million acre-feet of water annually for agriculture, urban, industrial, and environmental use. Additionally, a long-term average of about 8.2 million acre-feet of water per year is delivered to the Lower Colorado River Basin. The Region operates and maintains a total of 62 high and significant hazard dams and reservoirs, including National Critical Infrastructure, Major Mission Critical, and Mission Critical facilities. The reservoirs have an active storage capacity of 32.4 million acre-feet. Maintaining and managing this storage capacity is essential to meeting water delivery requirements during periods of drought and below average inflows. Additionally, the Region oversees the operation of 12 hydroelectric power plants that generate, on average, 4.69 billion kilowatt hours of electricity. The Region's Salinity Program prevents over 570,000 tons of salt from entering the Colorado River system each year. The Region's recreation facilities at its reservoirs host 7.7 million visitors a year.

The challenges facing the Region include implementation of three major Indian Water Rights Settlements; Endangered Species Act issues that continue to play an increasingly visible, costly, and important role in defining the Region's programs; ongoing maintenance of 260 miles of the Rio Grande Channel; aging critical infrastructure; and reducing the salt loading into the Colorado River system that causes significant damages to municipal and agricultural water users. Consequently, the Region's budget is driven by these issues.

Additionally, a focus was placed on other regional budgetary priorities including the Middle Rio Grande Project, with a total budget of \$25.9 million; the Endangered Species Recovery Implementation Program (RIP), with a total of \$4.9 million; the Colorado River Basin Salinity Control Program - Title II Basinwide Program, with a total of \$8.2 million; and the Colorado River Storage Project, Section 8, with a total of \$2.8 million. Together these priorities account for over 48 percent of the FY 2017 Water and Related Resources budget for the Region.

The Water and Energy Management and Development activity totals \$14.4 million. This is a decrease of \$88.6 million from 2016 enacted and reflects the proposal for the establishment of a separate IWRS account and other Regional priorities. This funding level will provide for water contract and repayment administration, water rights management, water quality monitoring and investigations, adjudication and/or litigation-related work, construction of rural water projects, salinity control, and the implementation of infrastructure improvement within the Rio Grande Pueblos.

Through the CRBSCP - Title II Basinwide Program, Reclamation solicits, ranks, and selects salinity control projects based on a competitive process through a Funding Opportunity Announcement (FOA) open to the public in the Upper Basin states of Utah, Colorado, and Wyoming. These salinity control projects reduce seepage that picks up salt and carries it into the Colorado River system. The salt causes economic damages in the Lower Basin states of Nevada, Arizona and California. Reclamation is budgeting \$8.2 million for this effort, which is a decrease of \$200,000 from the 2016 enacted. With the \$8.2 million, Reclamation will fund salinity control projects selected in a FOA that will control an additional 9,900 tons of salt per year for the next 50 years. The program has and continues to promote shared responsibility for salinity control by leveraging non-Federal funding through collaborative partnerships.

Through the Eastern New Mexico Rural Water System Project, Reclamation continues to provide oversight management and administration of financial support and assistance agreements to the Eastern New Mexico Water Utility Authority for planning, design and pre-construction of phased interim projects to deliver water to 8 member communities and Cannon Air Force Base. The FY 2017 request is \$1 million.

The **Land Management and Development** budget totals \$7.3 million to provide support for 41 projects/programs in the Region. This is a decrease of \$9 million from 2016 enacted, mainly due to the proposal for the establishment of a separate IWRS account. The funding level will support the minimum level of capability and acceptable performance required for recreational management activities and resource management planning. Funding will provide minimum life cycle support and capability required to oversee and manage 1.6 million acres of land and natural resources including license agreements, permits, cultural resources, land inventories and audits, Native American Graves Protection Repatriation Act activities, National Environmental Policy Act compliance, required record keeping, Geographical Information System activities, integrated pest management, hazardous waste removal, right-of-way resolution, and resource management plans.

The **Fish and Wildlife Management and Development** budget totals \$25.7 million, a decrease of \$701,000 from the 2016 enacted. The requirement to avoid jeopardy and to contribute to the recovery of endangered species in the Rio Grande requires the continuation and increase of Collaborative Program activities in the Middle Rio Grande Project. A total of \$13 million is budgeted for Middle Rio Grande fish and wildlife efforts. This represents an increase of \$1.4 million from 2016 enacted, which supports the finalization of the Middle Rio Grande Recovery Implementation Program (MRGRIP), Middle Rio Grande's supplemental water program and Collaborative Program participation. This work is essential to meeting ESA requirements through habitat restoration projects along 150 miles of river channel and floodplain, and includes research, monitoring, fish passage, fish propagation and rescue while also protecting existing water uses and ensuring compliance with all applicable laws.

In FY 2017, implementation of the Long-Term-Experimental and Management Plan (LTEMP) will begin for the Glen Canyon Unit, a component of the Colorado River Storage Project. A total of \$2.4 million is requested for this endeavor as well as for activities involved with the implementation of Biological Opinion requirements to ensure compliance with the Endangered Species Act.

The **Facility Operations** budget totals \$25.9 million, an increase of \$531,000 from 2016 enacted. Funds budgeted are to enable and support required minimum operation capabilities on 39 projects that are critical for the annual delivery of 12.6 million acre-feet of water. The funding will provide for continued operation and routine maintenance of project facilities.

The **Facility Maintenance and Rehabilitation** budget totals \$12.9 million, a decrease of \$1.9 million from 2016 enacted. Funding will provide for reliability inspections of bridges and dams, emergency management activities, reviews of O&M programs, and replacement and rehabilitation of and extraordinary maintenance on project facilities. Funding will also continue mission essential maintenance and rehabilitation of high priority sites on the Rio Grande and associated facilities that are critical to ensuring uninterrupted, efficient water delivery to Elephant Butte Reservoir and risk reduction, mitigation or elimination of river bank breach and flooding to the public and the project. The number of these high priority sites is dynamic, especially in areas with complex river responses. The funding is to sustain progress on reducing the existing number of priority sites, help monitor changing conditions on the river, as well as addressing ongoing adaptive management needs at completed sites. This is especially important given that the majority of remaining priority sites is located on tribal lands.

FY 2017 Planned Accomplishments include beginning the development of an Environmental Impact Statement (EIS) for Bosque del Apache Realignment and Restoration Project and initiation of a Fish Passage and Sediment Management feasibility level study at Isleta Diversion Dam for the Middle Rio Grande Project. Implementation of the Glen Canyon LTEMP is also anticipated to begin and will include refinements to dam operations as well as non-flow management actions and Conservation Measures under the Biological Opinion expected in 2016. Continued drilling is anticipated at San Luis Valley – Closed Basin Division, with a projection of 7-10 new wells to be drilled. Financial and technical support to the San Juan and Upper Colorado River Endangered Fish Recovery Programs under P.L. 106-392, as amended, including implementation of capital construction projects and other recovery actions is anticipated to continue. Through the CRBSCP - Title II Basinwide Program, Reclamation will fund salinity control projects selected in a FOA that will control an additional 9,900 tons of salt from entering the Colorado River system, per year, for the next 50 years. Also anticipated is the completion of construction activities at Mesilla Dam, a critical aging infrastructure along the Rio Grande; completion of the second year of a ten-year effort on habitat restoration projects in concert with river maintenance projects for the Middle Rio Grande Project, including adaptive maintenance at already finished river maintenance projects; and completion of the Orchard Mesa Irrigation District (OMID) Canal Automation Project and construction of the Tusher Wash Diversion Dam Fish Barrier, both components of the Upper Colorado River Endangered Fish Recovery Implementation Program (UCRIP).

FY 2016 Planned Accomplishments include anticipated publication of the draft EIS for the Glen Canyon Dam Long-Term Experimental and Management Plan in the first half of the fiscal year. Also, planned to continue is construction of the OMID Canal Automation Project, construction of the Tusher Wash Fish Barrier, financial and technical support to the San Juan and Upper Colorado River Endangered Fish Recovery Programs as well as implementation of capital construction projects and other recovery actions, and continued progress in the development of the MRGRIP in accordance with terms of a new Biological Opinion. The San Luis Valley-Closed Basin Division is projected to re-drill 7 wells and continue rehabilitation of salvage wells to increase production of salvage unconfined groundwater. Through the CRBSCP - Title II Basinwide Program, Reclamation anticipates selecting additional new salinity control projects that will control, collectively, 35,000 to 40,000 tons of salt from entering the Colorado River system. Completion of the San Felipe Phase 2 Upstream and Mescal Arroyo Confluence river projects on the Middle Rio Grande is anticipated, as well as adaptive maintenance on other river maintenance projects, as needed.

FY 2015 Accomplishments included continued efforts to meet ESA compliance requirements for the Middle Rio Grande after four years of unprecedented drought. Continued progress in the development of the draft EIS for the LTEMP and in negotiations with the U. S. Fish and Wildlife Service on final conservation measures for a new Biological Opinion and finalization of the MRGRIP. Financial and technical support to the San Juan and Upper Colorado River Endangered Fish Recovery Programs as well as implementation of capital construction projects and other recovery actions were provided. Through the CRBSCP – Title II Basinwide Program, salinity control features were installed that will now control over 8,600 tons of salt each year from entering the Colorado River system, for the next 50 years at a cost of about \$56 per ton. The San Luis Valley-Closed Basin Division re-drilled another 4 wells to salvage unconfined groundwater, while on the Middle Rio Grande Project, continued activity on the Santa Ana 205.8, San Felipe Phase 2 Downstream, and Truchas Arroyo Confluence river maintenance projects and additional adaptive maintenance activities remain ongoing.

Animas-La Plata Project Colorado River Storage Participating Project

LOCATION: This project is located in southwestern Colorado and northwestern New Mexico.

DESCRIPTION/JUSTIFICATION: The Colorado Ute Settlement Act Amendments of 2000 (Title III of P.L. 106-554, December 21, 2000) provides for the implementation, and operation and maintenance (O&M) of the Animas-La Plata Project. Features of the project are Ridges Basin Dam and Lake Nighthorse; Durango Pumping Plant; Ridges Basin Inlet Conduit; and Navajo Nation Municipal Pipeline. This request includes funding for continued life cycle operation and maintenance (O&M) for the facilities as well as the associated wetland and wildlife mitigation lands.

AUTHORIZATION: P.L. 90-537, Colorado River Basin Project Act, September 30, 1968; P.L. 96-301, Protect Archeological Resources in Southwestern Colorado, July 2, 1980; P.L. 100-585, Colorado Ute Indian Water Rights Settlement Act of 1988, November 3, 1988; P.L. 106-554, Colorado Ute Settlement Act Amendments of 2000, December 21, 2000; P.L 108-447, Consolidated Appropriations Act, 2005, December 8, 2004; P.L. 109-103, Energy and Water Development Appropriations Act, 2006, November 9, 2005; P.L. 109-148, Department of Defense Appropriations Act, 2006, December 30, 2005.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species recovery activities implemented

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$259,000	\$146,000
Land Management and Development	390,000	199,000
Fish and Wildlife Management and Development	300,000	324,000
Facility Operations	1,848,000	1,781,000
Facility Maintenance and Rehabilitation	95,000	202,000
Enacted/Request	\$2,892,000	\$2,652,000
Non-Federal	0	0
Prior Year Funds	739,843	0
Total Program	\$3,631,843	\$2,652,000
Prior Year Funds/Non-Federal	(739,843)	0
Total Reclamation Allotment	\$2,892,000	\$2,652,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues oversight and management of water quality by conducting an annual water quality monitoring program that regularly samples the Animas River and Lake Nighthorse. Continues administration of various repayment, water service, excess capacity and lease of power privilege contracts and defends project water rights. \$146,000

Land Management and Development - Continues land records management activities, outgrant processing, on-site inspections of lands that are closed to public use, necessary trespass resolutions, and management of several cultural resource sites located in the reservoir area and on the mitigation lands.

199,000

Fish and Wildlife Management and Development - Continues trout stocking and other wildlife management and monitoring tasks. 324,000

Facility Operations - Continues operation guidance to Animas-La Plata Operation, Maintenance, and Replacement Association, and O&M for the project features that include updating Emergency Action Plans, dam tender training for the Ridges Basin Dam, and the Confined Space Program. Continues O&M payments for the Navajo Nation, Southern Ute Tribe, and Ute Mountain Ute Indian Tribe portions of the project.

1,781,000

Facility Maintenance and Rehabilitation - Continues instrumentation data review, maintenance, and technical review of the current project, and examination of the 10 existing structures through identification of O&M deficiencies and dam safety concerns. Increase is due to additional bridge inspections, reviews, surveys, and technical assistance to water users on transferred facilities and maintenance of project facilities including the dam, the reservoir and the Durango Pumping Plant.

202,000

Reclamation Request \$2,652,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Balmorhea Project

LOCATION: The project is located in western Texas.

DESCRIPTION/JUSTIFICATION: Project features include Madera Diversion Dam, Phantom Lake Canal, District Main Canal, Inlet Feeder Canal, and Lower Parks Reservoir. The project conveys supplemental irrigation water to approximately 10,600 acres of farmland near the town of Balmorhea, Texas. Originally developed by private interests, the project was repaired, refurbished, and reconstructed by Reclamation in 1947. The United States purchased water rights to all water flowing from Phantom Lake Spring in excess of 3,337 acre-feet annually. Water from the spring is conveyed by canal to the irrigation system of Reeves County Water Improvement District No. 1 (District). The Balmorhea Project is operated under contract by the District for irrigation purposes. Reclamation's participation provides continued project oversight, contract administration, and coordination with the Texas Parks and Wildlife Department to protect Federal interests and ensure safe long-term operation of the project.

AUTHORIZATION: P.L. 76-398, Water Conservation and Utilization Act, August 11, 1939. Project repair, refurbishment, and reconstruction authorized by the President on April 15, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species (T&E) recovery activities

implemented

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Fish and Wildlife Management and Development	\$26,000	\$27,000
Facility Operations	14,000	13,000
Enacted/Request	\$40,000	\$40,000
Non-Federal	0	0
Prior Year Funds	13,610	0
Total Program	\$53,610	\$40,000
Prior Year Funds/Non-Federal	(13,610)	0
Total Reclamation Allotment	\$40,000	\$40,000

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development - Continues to provide stewardship for the maintenance of endangered species, namely the Commanche Springs Pupfish and Pecos Gambusia, and a wide variety of native wildlife endeavors, to include oversight and coordination with the Texas Parks and Wildlife Department and the United States Fish and Wildlife Service. **\$27,000**

Facility Operations - Continues required lifecycle water operations and maintenance of the Phantom Lake Spring located at Balmorhea, Texas.

13,000

Reclamation Request \$40,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Carlsbad Project

LOCATION: The project is located on the Pecos River in southeastern New Mexico.

DESCRIPTION/JUSTIFICATION: Project features include Sumner Dam and Lake (previously Alamogordo Dam and Reservoir), Brantley Dam and Reservoir, Avalon Dam and Reservoir, and 210 miles of distribution and drainage system to irrigate approximately 25,055 acres of farmland.

Reclamation contracts for operation, maintenance, and wildlife management tasks at Brantley Dam with the State of New Mexico Department of Game and Fish. Reclamation reimburses the Carlsbad Irrigation District (District) for the portions of operation and maintenance (O&M) at Brantley Dam and Reservoir that the water users are not obligated to pay in accordance with specific terms of the 1989 O&M agreement with the District. Reclamation funds 95.4 percent of Brantley Dam O&M costs. The District pays 4.6 percent of the O&M costs for Brantley Dam, 100 percent of O&M costs for Sumner Dam, and 68.36 percent for Sumner Dam radial gate rehabilitation. Title transfer to the Carlsbad Irrigation District of the distribution facilities and acquired lands was completed in July 2001.

Reclamation continues to support and implement the 2006-2016 Biological Opinion and July 19, 2006, Record of Decision on Carlsbad Project Water Operations and Water Supply Conservation through purchases of supplemental water. Reclamation is in consultation with the U.S. Fish and Wildlife Service for a new Biological Opinion beginning in 2016 and extending through the next ten years. Additionally, the biological assessment and studies on endangered fish and birds on the Pecos River require fish and wildlife mitigation and environmental tasks to ensure full operation of Sumner and Brantley Dams.

AUTHORIZATION: The Secretary of the Interior authorized the Carlsbad Project, November 28, 1905, and the President authorized Sumner Dam, November 6, 1935 in accordance with provisions of the Reclamation Act of 1902, June 17, 1902; P.L. 76-396, Alamogordo Dam and Reservoir, Carlsbad Project, August 11, 1939; P.L. 92-514, Reclamation Project Authorization Act of 1972, Oct. 20, 1972, which authorized Brantley Dam and Reservoir; P.L. 93-447, Sumner Dam and Lake Sumner, October 17, 1974.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species (T&E) recovery activities

implemented

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$57,000	\$64,000
Land Management and Development	280,000	321,000
Fish and Wildlife Management and Development	2,475,000	2,530,000
Facility Operations	1,283,000	1,181,000
Facility Maintenance and Rehabilitation	44,000	43,000
Enacted/Request	\$4,139,000	\$4,139,000
Non-Federal	63,000	63,000
Prior Year Funds	86,962	0
Total Program	\$4,288,962	\$4,202,000
Prior Year Funds/Non-Federal	(149,962)	(63,000)
Total Reclamation Allotment	\$4,139,000	\$4,139,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues oversight and technical assistance in the Pecos water rights adjudication process, associated litigation, and contract administration tasks. Continues to build on existing agreements and capitalize on efficiency gains in contract administration, project management experience, and strong relationships with project contractor and individual water-resource contractors.

Land Management and Development - Continues cultural resource surveys. Continues land resources management tasks that include grazing rights, rights of use, Geographic Information Services, and emergency response to areas around Brantley Reservoir. Continues efforts to control and/or eradicate invasive plant and animal species on approximately 40,000 acres of project land. 321,000

Fish and Wildlife Management and Development – Continues the required practice of purchasing water to offset the ongoing depletions of water, and to meet the Endangered Species Act requirements for the Pecos Bluntnose Shiner as specified in the 2006-2016 Biological Opinion and the expected new Biological Opinion. \$1,433,000

Continues tasks required to support and ensure compliance with the 2006-2016 Biological Opinion for Carlsbad Project Water Operations and Water Supply Conservation. and the new Biological Opinion beginning in 2016 and extending through the next ten years. Continues compliance and monitoring tasks to minimize take of the Pecos Bluntnose Shiner and the Interior Least Tern, and to assess the effects of water operations on the Pecos Bluntnose Shiner and Interior Least Tern populations. Restores and enhances habitats. Continues oversight and management of contract performance to support and ensure compliance with mitigation requirements, and establishment of Pecos Bluntnose Shiner refugia during drought years. Continues river model analysis and maintenance on the Pecos River Ware Decision Support Model. Continues required oversight, evaluation, and review of environmental compliance on the Carlsbad Project oil and gas activities. Continues environmental compliance related activities for facility repairs, recreation management, and Reclamation licensing tasks.

1,097,000

Subtotal, Fish and Wildlife Management and Development

2,530,000

Facility Operations - Continues O&M of Sumner, Brantley, and Avalon Dams as required for flood control and water delivery for irrigation, recreation, and fish/wildlife benefits. Continues oversight and

management required to develop and implement emergency management programs for each high hazard dam, as well as technical support and O&M reimbursements to the District, for all three dams, as applicable and as specified in the O&M agreement.

1,244,000

Non-Federal (Carlsbad Irrigation District)

(63,000)

Subtotal, Facility Operations

1,181,000

Facility Maintenance and Rehabilitation - Continues inspections and status reports for Sumner, Brantley and Avalon high hazard dams, in accordance with Reclamation's Safety of Dams Program, and technical oversight activities for the Sumner Dam radial gate rehabilitation.

43,000

Reclamation Request \$4,139,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Collbran Project

LOCATION: The project is located on the Grand Mesa near Grand Junction, in western Colorado.

DESCRIPTION/JUSTIFICATION: The Collbran Project developed major parts of the unused water in Plateau Creek and its principal tributaries. The project consists of the Vega Dam and Reservoir, two power plants, two major diversion dams, 37 miles of canal, and about 18 miles of pipeline and penstock. The project provides full irrigation for 2,500 acres and supplemental irrigation for 19,000 acres. The two power plants have a combined generating capacity of 13,500 kilowatts. The Collbran Water Conservancy District operates all irrigation facilities and Reclamation operates the power facilities.

AUTHORIZATION: P.L. 82-445, Collbran Project, July 3, 1952; P.L. 89-72, Federal Water Projects Recreation Act, July 9, 1965; P.L. 92-500, Clean Water Act, October 18, 1972; P.L. 102-575, Title XXVIII, the Reclamation Recreation Management Act of 1992, Oct. 30, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$119,000	\$109,000
Land Management and Development	118,000	120,000
Facility Operations	1,580,000	1,853,000
Facility Maintenance and Rehabilitation	104,000	107,000
Enacted/Request	\$1,921,000	\$2,189,000
Non-Federal	0	0
Prior Year Funds	290,557	0
Total Program	\$2,211,557	\$2,189,000
Prior Year Funds/Non-Federal	(290,557)	0
Total Reclamation Allotment	\$1,921,000	\$2,189,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues tasks necessary to ensure the delivery of project water and benefits including the review and approval of reallocations and transfers, drafting and amending water contracts, compliance with contractual obligations, administration, protection of existing water rights, and development of new water rights. \$109,000

Land Management and Development - Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides National Environmental Policy Act compliance in association with public requests to use recreation land and facilities.

120,000

Facility Operations - Continues dam tender training for the Vega Dam, essential direct operations necessary for the delivery and storage of water at the Upper and Lower Molina Power Plants, updating Standing Operating Procedures, and assisting entities downstream from Reclamation facilities in preparing and implementing Emergency Action Plans. Continues routine maintenance on the infrastructure required to deliver project benefits, contractual Federal share of the maintenance costs of Vega Dam and Reservoir and Southside Canal, lifecycle maintenance for the delivery and storage of water for the power plant, operation of the Grand Mesa Collection System to deliver water for power generation at the Upper and Lower Molina Power Plants, and to provide irrigation water in dry years.

1,853,000

Facility Maintenance and Rehabilitation - Continues inspections and maintenance of fourteen Type 1 and fifteen Type 2 bridges, examination of project structures and facilities, preparation of examination reports, instrumentation monitoring, and updating of project records and drawings. **107,000**

Reclamation Request \$2,189,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Colorado River Basin Salinity Control Program Title II – Basinwide Program

LOCATION: Individual projects under this Program are located throughout the Colorado River Basin States of Wyoming, Colorado, Utah, New Mexico, Nevada, Arizona, and California.

DESCRIPTION/JUSTIFICATION: The Colorado River Basin Salinity Control Program Title II (Salinity Program) is among Reclamation's first stream restoration programs. The Salinity Program enhances and protects the quality of water available to users in the United States and Mexico by implementing water quality improvement projects on both public and private lands and facilities. These improvement projects limit economic and environmental damages that salinity causes to water users in Arizona, California, Nevada, and in Mexico. The current drought that has significantly impacted the West affects the amount and quality of available water, especially for potable water uses. Climate change amplifies the need for lower concentrations of salt in the Colorado River, particularly in the Lower Colorado River Basin (Lower basin). The higher the salt concentration in the Colorado River, the higher the cost to treat it for potable uses, in particular, treatment for re-use. Lower salt concentration benefits the Lower basin where the water is used and re-used. Conversely, higher concentrations of salt limits the number of times water can be re-used and disposal of the brackish water, or brine, is problematic and expensive. It is more cost-effective to prevent or control salt from entering the Colorado River system than to remove the salt afterward in the Lower Basin.

Without the Salinity Program, it is estimated that the current quantified economic damages would be over \$618 million per year for all participating projects. Current measures in place control approximately \$252 million in quantified economic salinity damages to municipal and agricultural water users along the Colorado River. This is a 41 percent reduction in economic salinity damages.

P.L. 104-20 amended the Salinity Control Act, P.L. 93-320 and authorized Reclamation, through the Basinwide Program, to take advantage of new cost-effective opportunities to control salinity in the Basin. Through the Basinwide Program, Reclamation solicits, ranks, and selects new salinity control projects based on a competitive process open to the public approximately every 3 years. If new improvement projects do not continue to be implemented it is estimated that economic damages, due to uncontrolled salt, will increase from \$366 million currently to \$629 million by 2035.

For every \$1.00 of appropriation that Reclamation receives for the Salinity Program, an additional \$0.43 in cost-share comes from the Upper Colorado River Basin Fund and the Lower Colorado River Basin Development Fund (Basin Funds). The \$0.43 represents a 30 percent cost share of the total yearly program funds. This allows for more projects in the Salinity Program to be completed.

Under the Basinwide Program, Reclamation is currently controlling approximately 231,000 tons of salt per year. Reclamation and its Basin State partners have set a new goal in 2014 for Reclamation to control 451,000 tons of salt in the Basinwide Program per year by FY 2035. For Reclamation to meet this target it needs to implement another 220,000 tons per year of salinity control measures.

AUTHORIZATION: P.L. 93-320, Colorado River Basin Salinity Control Act, June 24, 1974; P.L. 98-569, Colorado River Basin Salinity Control Act Amendment, October 30, 1984; P.L. 104-20, Colorado River Basin Salinity Control Act Amendment, July 28, 1995; P.L. 104-127, Federal Agriculture Improvement and Reform Act of 1996, April 4, 1996; P.L. 106-459, Colorado River Basin Salinity Control Act Amendment, November 7, 2000; P.L. 110-246, Food, Conservation, and Energy Act of 2008, June 18, 2008.

COMPLETION DATA: As of September 30, 2015, based on the current tons of salt control, the Program is estimated to be 43 percent complete. As of September 30, 2015, Reclamation had expended 74 percent of its authorized cost ceiling for all Title II programs and projects.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$8,423,000	\$8,162,000
Enacted/Request	\$8,423,000	\$8,162,000
Non-Federal ^{1/}	3,610,000	3,498,000
Prior Year Funds	27,229	0
Total Program	\$12,060,229	\$11,660,000
Prior Year Funds/Non-Federal	(3,637,229)	(3,498,000)
Total Reclamation Allotment	\$8,423,000	\$8,162,000

¹/₂ Cost-share portion for the Basinwide Program.

Total Construction Costs to be allocated

	Total Estimated Cost ^{1/}	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation	\$639,418,000	\$474,244,000	\$8,423,000	\$8,162,000	\$148,589,000
Cost-Sharing 2/	274,036,000	203,247,429	3,610,000	3,498,000	63,680,571
Total	\$913,454,000	\$677,491,429	\$12,033,000	\$11,660,000	\$212,269,571

¹/ Total Estimated Cost represents current authorized indexing.

Cost-share portion for the USDA/NRCS Salinity Program is collected and accounted for in a separate Salinity Control Title II non-appropriated program. Funding is not used in the Basinwide Program.

COST-SHARING: A 30 percent cost share collected from the Basin Funds is added to the appropriations received for the Program.

APPROPRIATION CEILING: Appropriations authorized are \$639,418,000 (October 2017 projected price levels). The amount of the ceiling remaining in the Federal obligation for the Basinwide, Title II Program is \$148,589,000. This authorization (with indexing) is adequate to complete about 70 percent of the Basinwide Program as currently proposed

²/ Cost-share portion for the Basinwide Program advanced from the Basin Funds.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to award agreements for salinity control projects in the Upper Colorado River Basin in an effort to lower concentrations of salt in the Colorado River water used in the Lower Colorado River Basin. For every \$1,000,000 in appropriations received, approximately 1,100 tons of new salt control is implemented through salinity projects selected in Funding Opportunity Announcements that occur every 2-3 years. The salinity projects come from the Upper Colorado River Basin States of Colorado, New Mexico, Utah, and Wyoming.

\$11,660,000

Non-Federal (Upper Colorado River Basin Fund)

(3,498,000)

Subtotal, Water and Energy Management and Development

\$8,162,000

Reclamation Request

\$8,162,000

SEE APPENDIX FOR: Benefit cost Rations as of October 1, 2016

Colorado River Storage Project, Section 5

LOCATION: Projects are located in the Colorado River Basin States of Arizona, Colorado, New Mexico, Utah, and Wyoming.

DESCRIPTION/JUSTIFICATION: The four initial units of the Colorado River Storage Project (CRSP) include Glen Canyon Dam, Wayne N. Aspinall Dam, Flaming Gorge Dam, their associated Reservoirs and Power Plants and Navajo Dam and Reservoir. Participating projects include: Animas-La Plata, Bostwick Park, Central Utah (including the Bonneville, Jensen, and Vernal Units), Dallas Creek, Dolores, Emery County, Florida, Hammond, Lyman, Navajo-Gallup Water Supply, Navajo Indian Irrigation, Navajo Unit, Paonia, San Juan-Chama, Seedskadee, Silt, and Smith Fork. The Eden Project is a participating project only to the extent that CRSP power revenues are being used to repay construction costs of the irrigation features which are not reimbursable by the water users.

Navajo-Gallup Water Supply projects are listed separately, as are Animas-La Plata, and the Recreation and Fish and Wildlife facilities for the Glen Canyon, Navajo Unit, and Wayne N. Aspinall Units (see CRSP Section 8). The Navajo Indian Irrigation Project is funded by the Bureau of Indian Affairs, but is being built by Reclamation.

Navajo-Gallup Water Supply project description and information can be found under the Indian Water Rights section. Funding from revenues produced by these projects for power and related features of the CRSP are described in the Revenue Financed Programs section.

Continued oversight of the operation and maintenance (O&M) provided by the participating projects is required to ensure preservation of the Federal investment. Non-reimbursable operation and maintenance activities as required by law, legal agreement, or Reclamation policy are also required to be continued.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902; P.L. 76-68, Interior Appropriations Act of 1940, May 10, 1939; P.L. 80-117, Paonia Project, June 25, 1947; P.L. 81-132, Completion of Eden Project, June 28, 1949; P.L. 84-485, Colorado River Storage Project Act, April 11, 1956; P.L. 88-568, Colorado River Storage Project, September 2, 1964; P.L. 90-537, Colorado River Basin Project Act, September 30, 1968; P.L. 92-500, Clean Water Act, October 18, 1972; P.L. 102-575, Title II-VI Central Utah Project Completion Act, October 30, 1992; P.L. 98-569, October 30, 1984 (authorized salinity control as a purpose of the Dolores Project and combines features of the McElmo Creek Unit, Colorado River Water Quality Improvement Program, with the Dolores Project); P.L. 104- 127, Federal Agriculture Improvement and Reform Act of 1996, authorizes cost-sharing from Basin Funds in lieu of repayment for the salinity program, April 14, 1996; P. L. 111-11, Omnibus Public Land Management Act of 2009, March 30, 2009, authorizes Navajo-Gallup Water Supply Project as a CRSP participating project.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species recovery activities implemented

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's

Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$1,177,000	\$1,204,000
Land Management and Development	2,658,000	2,651,000
Fish and Wildlife Management and Development	101,000	80,000
Facility Operations	4,630,000	5,357,000
Facility Maintenance and Rehabilitation	1,105,000	1,143,000
Enacted/Request	\$9,671,000	\$10,435,000
Non-Federal 1/	3,108,000	3,054,000
Prior Year Funds	1,090,694	0
Total Program	\$13,869,694	\$13,489,000
Prior Year Funds/Non-Federal	(4,198,694)	(3,054,000)
Total Reclamation Allotment	\$9,671,000	\$10,435,000

¹/ Includes \$291,000 for the Dolores Project in FY 2016 and \$307,000 in FY 2017 from Revenue Financed Programs

WORK PROPOSED FOR FY 2017:

Bonneville Unit, Central Utah Project - Begins hydrologic studies and investigations to consider opportunities to increase conservation and operational efficiency. Continues water right activities to include protecting project water rights from the activities of others that may adversely impact project operation. Continues to facilitate and promote identification and development of recommended solutions to improve water operations. Continues land resources management, to include asset inventory system database management, project right-of-way, and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to the National Environmental Policy Act (NEPA), outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. Continues recreation management and oversight of the managing entity, to include concessionaire, for project facilities. Continues to perform overview of flood control operations at Jordanelle and Starvation Dams, Continues to provide reservoir operating plans, river and reservoir modeling, and coordination for project facilities. Continues assistance to local governments and emergency management personnel in the development of local Emergency Operating Plans. Continues revision to project facilities Emergency Action Plans (EAP) and Standing Operating Procedures (SOP). Continues contract obligation of Reclamation to pay the Central Utah Water Conservancy District costs assigned to non-reimbursable functions. Continues oversight of O&M on project facilities being operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program. Increase is due to the start of the hydrology studies and investigations. \$2,775,000

Bostwick Park Project - Continues tasks necessary to ensure the delivery of project water and benefits including the review and approval of reallocations and transfers, drafting and amending water contracts, compliance with contractual obligations, administration, protection of existing water rights, development of new water rights, and water quality investigations and monitoring. Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of

recreation facilities and land resources; and provides NEPA compliance in association with public requests to use or alter recreation lands and facilities. Continues O&M automated data collection system activities. Continues O&M of facilities such as the dam, reservoir, outlet and inlet works, including four laterals associated with the project and surrounding grounds, EAP activities, and dam tender training for Silver Jack Dam. Continues instrumentation data review and maintenance; examination of existing structures during the annual dam exam for identification of O&M deficiencies and dam safety concerns.

277,000

Colorado River Storage Project (Initial Units) - Continues Office of Worker's Compensation Program payments. Continues management, oversight, and administration of the project. Continues Biological Opinion requirements for Flaming Gorge Dam and Reservoir. 87,000

Dallas Creek Project - Continues tasks necessary to ensure the delivery of project water and benefits including the review and approval of reallocations and transfers, drafting and amending water contracts, compliance with contractual obligations, administration and protection of existing water rights, development of new water rights, and water quality administration activities. Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides NEPA compliance in association with public requests to use recreation land and facilities. Continues O&M of Ridgeway Dam and Reservoir facilities and associated grounds, SOP's, water supply forecasting, hydrologic database activities, EAP tasks, flood control operations, and dam tender training. Continues inventory, inspection, and maintenance of one Type 2 bridge across the spillway stilling basin, instrumentation data review and maintenance, and examination of existing structures to ensure public safety through the identification of O&M deficiencies and dam safety concerns. 443,000

Dolores Project - Continues water quality monitoring, administration and protection of existing project water rights, and development of new water rights including litigation, repayment, water service, and carriage contract administration and development. Continues tasks necessary to ensure the delivery of project water and benefits, such as the review and approval of reallocations and transfers, drafting and amending water contracts, compliance with contractual obligations, and investigations and resolution of unauthorized use. Continues integrated pest management, recreation field reviews, record keeping and reporting, and oversight management. Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides NEPA compliance in association with public requests to use recreation land and facilities. Continues EAP tasks, dam tender training for McPhee Dam and Great Cut Dike, administration of water releases, and contract payments for O&M of fish and wildlife, salinity control, and wetlands mitigation. Continues inventory, inspection, maintenance of bridges, instrumentation data review and maintenance, and examination of existing structures to ensure public safety through the identification of O&M deficiencies and dam safety concerns. \$1,594,000 (307,000)

Non-Federal (Upper Colorado River Basin Fund)

1,287,000

Eden Project - Continues ongoing phases of the study to develop micro-scale water and power projects. Continues administration and compliance activities associated with the administration of project lands, to include adherence to NEPA, outgrant and agreement processing, and trespass resolution in conjunction with oversight of the unauthorized use of project lands. Continues assistance to local governments and emergency management personnel in the development of local Emergency Operating Plans. Continues revisions to project facilities EAP's and SOP's. Continues oversight of O&M on project facilities being

operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

322,000

Emery County Project - Continues oversight and administration of contract repayment. Continues ongoing development of a comprehensive program to install instrumentation and automation equipment throughout the river basin to coordinate operations and enhance water management. Continues land resources management, to include asset inventory system database management, Geographic Information System activities, and project right-of-way and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to NEPA, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. Continues assistance to local governments and emergency management personnel in the development of local Emergency Operating Plans. Continues revisions to project facilities EAP's and SOP's. Continues oversight of O&M of project facilities being operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

Florida Project - Continues basic water quality monitoring, administration of the project repayment contract and water petitions. Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides NEPA compliance in association with public requests to use recreation land and facilities Continues O&M of automated data collection system activities, O&M of facilities including Lemon Dam and associated grounds, EAP tasks, dam tender training, and identification of O&M deficiencies and dam safety concerns. Continues inventory, inspection, and maintenance of bridges. Continues instrumentation maintenance and data review, and examination of existing structures.

347,000

Hammond Project - Continues the administration of various repayment, water service, excess capacity and lease of power privilege contracts. Defends project water rights and monitors water quality. Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides NEPA compliance in association with public requests to use recreation land and facilities. Continues EAP tasks, Hammond Diversion Dam operators training, and O&M technical assistance. Continues inventories, review of O&M for project structures, safety follow-up, and examination of existing structures to ensure public safety through the identification of O&M deficiencies and dam safety concerns.

136,000

Jensen Unit, Central Utah Project - Continues contract repayment administration and water right activities for projects, to include water quality investigations and water rights filing monitoring. Continues land resources management, to include asset inventory system database management, project right-of-way, and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to NEPA, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. Continues assistance to local governments and emergency management personnel in the development of local EAP's and SOP's. Continues review of O&M of project facilities operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

Lyman Project - Continues oversight and administration of contract repayment. Continues activities to facilitate and promote identification and development of recommended solutions to improve water operations. Continues administration and compliance activities associated with the administration of project lands, to include adherence to NEPA, and outgrant and agreement processing. Continues

assistance to local governments and emergency management personnel in the development of local Emergency Operating Plans. Continues revision to project facilities EAP's and SOP's. Continues oversight of O&M on project facilities operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program. **260,000**

Navajo Unit - Continues water quality monitoring, administration of the project repayment contracts, and water reallocation petitions. Continues O&M cost-share of the recreation facility, O&M of automated data collection system activities, O&M of facilities and associated grounds, EAP tasks, and dam tender training. Increase is due to a water system improvement for recreation facilities because the existing system is failing. A cost-share contract already exists with the State of Colorado but a new recreation lease agreement with New Mexico also requires an O&M cost-share.

871,000
Non-Federal (States of Colorado)
(232,000)

639,000

Paonia Project - Continues the administration of various repayment, water service, excess capacity and lease of power privilege contracts. Defends project water rights and monitors water quality. Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides NEPA compliance in association with public requests to use recreation land and facilities. Continues EAP tasks, dam tender training for Paonia Dam, and O&M payment for Paonia State Park recreation facilities. Continues inventory, inspection, and maintenance of bridges, instrumentation data review and maintenance, and examination of existing structures to ensure public safety through the identification of O&M deficiencies and dam safety concerns.

Non-Federal (State of Colorado) (6,000)

373,000

San Juan-Chama Project - Continues oversight and management of repayment contracts for 18 water users. Continues land resource management. Planned activities include issuance of permits for removal of stockpiled sediment from diversion dams, and review of Bureau of Land Management administered oil/gas lease activities adjacent to project facilities. Continues required annual reimbursement to the Pueblo of Nambe for operation of the recreation area at Nambe Falls. Continues environmental support to ensure O&M activities are in compliance with the Clean Water Act and NEPA, and follows good integrated pest management practices. Specific planned activities include monitoring of sediment management at the diversion dams. Continues non-reimbursable O&M activities at Nambe Falls Dam, Heron Dam, Oso, Little Oso, and Blanco Diversion Dams and associated conveyance facilities. Planned non-reimbursable activities for FY 2017 include a Table Top Emergency Management exercise for Heron and a routine update of the EAP for Nambe Falls. Continues the Federal cost share of reimbursable activities triggered by the fish and wildlife benefits of Heron Reservoir, and the fish, wildlife, and recreation benefits of Cochiti Reservoir. Continues the Federal cost share of both Reclamation and Pojoaque Valley Irrigation District reimbursable activities due to the fish and wildlife benefits of Nambe Falls Reservoir. Planned reimbursable activities include routine O&M for Heron and the diversions, O&M support for Nambe Falls, and the following special projects: completion of the Supervisory Control and Data Acquisition system replacement for Heron and the diversions, scheduled to have begun in FY 2016; and investigations/design for major repairs to the diversions. Continues required annual inspections at Heron Dam, and provides for a Periodic Facility Review and Periodic Security Review at Nambe Falls Dam. Continues Safety of Dams and security reporting. 2,058,000

Non-Federal Cost Share Contributors include: Albuquerque Bernalillo County Water Utility Authority, Middle Rio Grande Conservancy District, Jicarilla Apache Tribe, city of Santa Fe, Taos Pueblo, Ohkay Owingeh Pueblo, county of Los Alamos, Pojoaque Valley Irrigation District, city of Española, town of

Belen, town of Bernalillo, town of Taos 1, town of Taos 2, town of Los Lunas, Santa Fe County, town of Red River, El Prado Water and Sanitation District, Village of Taos Ski Valley.

(1,436,000)

622,000

Seedskadee Project - Continues integrated pest management activities at Fontenelle Reservoir. Continues required recreation administration and management of contracts with the Bureau of Land Management to ensure compliance with Federal laws and regulations for public use of the reservoir.

99,000

Silt Project - Continues the administration of various repayment, water service, excess capacity and lease of power privilege contracts. Defends project water rights and monitors water quality. Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides NEPA compliance in association with public requests to use recreation land and facilities. Continues O&M payment for recreation facilities associated with Rifle Gap State Park, O&M of facilities including Rifle Gap Dam and Reservoir, the Silt Pumping Plant, Silt Pump Canal, Davie Ditch and Dry Elk Lateral and associated grounds, EAP tasks, and dam tender training for Rifle Gap Dam. Continues inventory, inspection, and maintenance of bridges, instrumentation data review and maintenance, and examination of existing structures to ensure public safety through the identification of O&M deficiencies and dam safety concerns.

Non-Federal (State of Colorado)

649,000 (180,000)

469,000

Smith Fork Project - Continues periodically scheduled water quality monitoring, tasks required to ensure the delivery of project water and benefits, including the review and approval of reallocations and transfers, drafting and amending water contracts, compliance with contractual obligations, administration, and protection of existing water rights, and development of new water rights. Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides NEPA compliance in association with public requests to use recreation land and facilities. Continues O&M of project facilities and associated lands, EAP tasks, dam tender training, and O&M payment of all recreation facilities associated with Crawford State Park. Continues inventory, inspection, and maintenance of bridges, instrumentation data review and maintenance, and examination of existing structures to ensure public safety through the identification of O&M deficiencies and dam safety concerns.

Non-Federal (State of Colorado)

(143,000)

446,000

Vernal Unit, Utah Project - Continues management, oversight, and coordination activities for the project. Continues land resources management, to include asset inventory system database management, project right-of-way, and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to NEPA, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. Continues recreation management and oversight of the managing entity, to include concessionaire, for project facilities. Continues reservoir operating plans, river and reservoir modeling, and coordination of project facilities. Continues assistance to local governments and emergency management personnel in the development of local Emergency Operating Plans. Continues revision to project facilities EAP's and SOP's. Continues review of O&M of project facilities operated

and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program. 1,802,000

Non-Federal (State of Utah) (750,000)

1,052,000

Reclamation Request

\$10,435,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Colorado River Storage Project, Section 8 Recreational and Fish and Wildlife Facilities Glen Canyon Unit, Arizona Navajo Unit, Colorado Wayne N. Aspinall Storage Unit, Colorado

LOCATION: Projects are located in the Colorado River Basin States of Arizona, Colorado, New Mexico, and Wyoming.

DESCRIPTION/JUSTIFICATION: Section 8 of the Colorado River Storage Project (CRSP) Act, enacted April 11, 1956, authorized and directed the Secretary of the Interior to investigate, plan, construct, operate, and maintain: (1) public recreational facilities on lands withdrawn or acquired for the development of the CRSP, or participating projects, to conserve the scenery; the natural, historic, and archeological objects; and wildlife on said lands and to provide for the public use and enjoyment of the lands and water areas created by these projects by such means as are consistent with the primary purposes of the project; and (2) facilities to mitigate losses of, and improve conditions for, the propagation of fish and wildlife. The Glen Canyon Dam Adaptive Management Program, a component of CRSP, Section 8, is included in the America's Great Outdoors (AGO) Rivers Initiative and supports AGO's objectives to conserve, restore and connect people to the great outdoors.

AUTHORIZATION: P.L. 84-485, Colorado River Storage Project, April 11, 1956; P.L. 89-72, Federal Water Project Recreation Act, July 9, 1965; P.L. 93-205, Endangered Species Act of 1973; P.L. 102-575, Reclamation Projects Authorization and Adjustment Act of 1992, Title XVIII, Grand Canyon Protection Act, October 30, 1992.

COMPLETION DATA: Reclamation committed to carry out conservation measures in the U.S. Fish and Wildlife Service's 2007 Shortage Guidelines Biological Opinion (BiOp) and subsequent BiOps. Preparation of an environmental impact statement (EIS) on the operation of Glen Canyon Dam, pursuant to the Grand Canyon Protection Act, was initiated in 2011 and work on this EIS is ongoing.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species recovery activities implemented

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Cultural and Heritage Resources

Performance Measure: Percent of collections in DOI inventory in good condition

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Land Management and Development	\$100,000	\$100,000
Fish and Wildlife Management and Development	2,150,000	2,665,000
Enacted/Request	\$2,250,000	\$2,765,000
Non-Federal	0	0
Prior Year Funds	17,421	0
Total Program	\$2,267,421	\$2,765,000
Prior Year Funds/Non-Federal	(17,421)	0
Total Reclamation Allotment	\$2,250,000	\$2,765,000

APPROPRIATION CEILING: The Glen Canyon Unit was originally authorized by P.L. 84-485 in 1956 as part of the CRSP. Separate appropriation ceilings were not kept on individual units of the project. Glen Canyon Dam and Power Plant were completed in 1966. In 1973, the Endangered Species Act was enacted adding new regulatory requirements. The 2007 and 2011 BiOps require implementation of conservation measures for endangered fish. All costs related to this effort are deemed required by "general legislation" and thus have no appropriation ceiling requirements.

WORK PROPOSED FOR FY 2017:

Land Management and Development -

Glen Canyon Unit - Continues collection management tasks of Glen Canyon archaeological collections of the Museum of Northern Arizona, Utah Museum of Natural History, and Museum of New Mexico, and the Anasazi Heritage Center. \$100,000

Fish and Wildlife Management and Development -

Glen Canyon Unit - Begins implementation of commitments under the Long-Term Experimental and Management Plan (LTEMP) Record of Decision. Continues implementation of BiOp requirements to ensure compliance with the Endangered Species Act; principally for the Colorado Pike Minnow, the Razorback Sucker, the Bonytail, and the Humpback Chub. Increase is due to implementation activities pursuant to the Record of Decision for LTEMP. \$2,400,000

Wayne N. Aspinall Unit - Continues oversight and management of contract for Hotchkiss Fish Hatchery operations. 265,000

Subtotal, Fish and Wildlife Management and Development

2,665,000

Reclamation Request

\$2,765,000

Colorado River Water Quality Improvement Program

LOCATION: Projects are located in the Colorado River Basin States of Wyoming, Colorado, Utah, New Mexico, Nevada, Arizona, and California.

DESCRIPTION/JUSTIFICATION: Salinity damages to municipal and agricultural water users of Colorado River water are currently about \$366 million per year. The salinity program is designed to meet the objectives of the Colorado River Basin (Basin) Water Quality Standards. These standards include a plan of implementation to limit further degradation of water quality in southern California, Arizona, Nevada, and deliveries to Mexico. The goal of the program is to seek cost-effective, regional solutions to the problem.

AUTHORIZATION: P.L. 93-320, Colorado River Basin Salinity Control Act, June 24, 1974; P.L. 98-569, Colorado River Basin Salinity Control Act Amendment, October 30, 1984; P.L. 104-20, Colorado River Basin Salinity Control Act Amendment, July 28, 1995; P.L. 104-127, Federal Agriculture Improvement and Reform Act of 1996, April 4, 1996; and P.L. 106-459, Colorado River Basin Salinity Control Act Amendment, November 7, 2000.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$380,000	\$380,000
Enacted/Request	\$380,000	\$380,000
Non-Federal	0	0
Prior Year Funds	87,932	0
Total Program	\$467,932	\$380,000
Prior Year Funds/Non-Federal	(87,932)	0
Total Reclamation Allotment	\$380,000	\$380,000

Total Cost Information

Investigation Costs: Initiation: FY 1972 Completion: Ongoing

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation	\$61,000,000	\$45,416,701	\$380,000	\$380,000	\$14,823,299
Total	\$61,000,000	\$45,416,701	\$380,000	\$380,000	\$14,823,299

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues investigations to develop a comprehensive cost-effective program for salinity control in the Colorado River Basin. Continues program development, management, coordination, economic impact, effectiveness analysis, environmental compliance, and evaluating compliance with water quality standards.

\$380,000

Reclamation Request

\$380,000

Eastern New Mexico Rural Water System Project

LOCATION: The program is located in Quay, Roosevelt, and Curry counties in eastern New Mexico.

DESCRIPTION/JUSTIFICATION: Ute Reservoir, on the Canadian River, was constructed by the New Mexico Interstate Stream Commission to supply water to communities in the region. Eight municipalities and three counties entered into a joint powers agreement to form the Eastern New Mexico Water Utility Authority (ENMWUA) to develop a project to deliver water from Ute Reservoir to member communities. The ENMWUA is comprised of the cities of Clovis, Texico, Grady, Melrose, Portales, Elida, Cannon Air Force Base (CAFB) (operating under a lease agreement with Clovis), and the counties of Quay, Roosevelt, and Curry. The eight communities maintain a water delivery contract with the State of New Mexico for 16,450 acre feet per annum from Ute Reservoir. The use of Ute Reservoir water would provide a long-term renewable water supply and reduce the dependence of the eight communities on rapidly diminishing and/or impaired groundwater in the Ogallala Aquifer.

AUTHORIZATION: P.L. 111-11, Section 9103, Omnibus Public Land Management Act of 2009, March 31, 2009.

COMPLETION DATA: As of September 30, 2015, the Federal Government has expended approximately 1.9 percent of its maximum authorized cost share, and the non-Federal sponsor has expended approximately 32.8 percent of its minimum cost-share.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$47,000	\$1,000,000
Enacted/Request	\$47,000	\$1,000,000
Non-Federal	3,100,000	1,500,000
Prior Year Funds	6,287	0
Total Program	\$3,153,287	\$2,500,000
Prior Year Funds/Non-Federal	(3,106,287)	(1,500,000)
Total Reclamation Allotment	\$47,000	\$1,000,000

COST SHARING: P.L. 111-11 limits Federal cost share to 75 percent of total project costs (subject to cost indexing), at least 25 percent of the total project cost is non-Federal. All Federal costs are non-reimbursable.

Total Cost Information

	Total Estimated	Total to			Balance to
	Cost	9/30/15	FY 2016	FY 2017	Complete
Reclamation	\$389,581,889	\$7,316,305	\$47,000	\$1,000,000	\$381,218,584
Non-Federal	129,860,629	31,343,487	3,100,000	1,500,000	93,917,142
Total	\$519,442,518	\$38,659,792	\$3,147,000	\$2,500,000	\$475,135,726

Construction Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Municipal & Industrial Water	\$519,442,518	\$519,442,518

METHODOLOGY: The methodology of cost allocation has not been finalized.

APPROPRIATION CEILING: P.L. 111-11, Section 9103, Omnibus Public Land Management Act of 2009, March 31, 2009 authorized development and construction of this project at a federal cost of \$327 million in January 2007 dollars (subject to cost indexing).

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues oversight, management and administration of financial support and assistance agreements to the ENMWUA for planning, design and construction of related interim projects to deliver groundwater to the eight communities and CAFB several years before treated surface water is delivered from the Ute Reservoir Pipeline. Reclamation will monitor construction of planned project features for the phased interim groundwater pipeline project. This funding would augment the non-Federal contribution of \$9.2 million needed for construction to begin on Phase 1A planned for February 2017. Increase is due to the need to monitor construction of project features being implemented in FY 2017. \$2,500,000

Non-Federal (State of New Mexico) (1,500,000)

Subtotal, Water and Energy Management and Development

\$1,000,000

Reclamation Request

\$1,000,000

Endangered Species Recovery Implementation Program

LOCATION: States participating in this program include Colorado, New Mexico, Texas, Utah, and Wyoming.

DESCRIPTION/JUSTIFICATION: The Upper Colorado and San Juan River Basins' Endangered Fish Recovery Programs were authorized October 30, 2000. The Upper Colorado Recovery Implementation Program was formally established January 1988. In October 1992, a similar program was implemented for the San Juan River Basin. These two recovery programs are intended to go beyond removal of jeopardy to the recovery of four species of endangered fish while allowing the states to develop their full compact water entitlement, in compliance with interstate compacts and various laws. Work focuses on four major areas: 1) Habitat Management - providing and protecting in-stream flows; 2) Habitat Development and Maintenance - fish ladders, fish screens, levee removal, and flooded bottom land restoration; 3) Augmentation and Conservation - of Genetic Integrity - propagation facilities, and stocking efforts; and non-native and sport fish management; 4) Conservation of other aquatic and terrestrial endangered species - restoring habitat and enhancing stream flows. The overarching goal of the program is to develop, implement, and sustain a long-term program to take actions for the preservation, conservation, and recovery of endangered, threatened, proposed, and candidate species, resident and/or migratory habitats within the Upper Colorado River Basin. Stakeholders and Partners include the States of Colorado, New Mexico, Texas, Utah, and Wyoming, as well as the Fish and Wildlife Service, National Park Service, Western Area Power Administration, Bureau of Indian Affairs, Bureau of Land Management, water users, hydropower consumers, and environmental organizations. The Upper Colorado River and the San Juan River Endangered Fish Recovery Programs are included in the America's Great Outdoors (AGO) Rivers Initiative and support AGO's objectives to conserve, restore and connect people to the great outdoors.

Continued funding is critical to avoid restrictions on the operation of Federal and non-Federal water and power projects in the Upper Colorado River Basin arising in regard to the ability to maintain Endangered Species Act compliance. The recovery programs currently provide Endangered Species Act compliance for more than 2,354 water projects depleting more than 3.7 million acre-feet per year based on the total number of consultations through 2012-2013.

AUTHORIZATION: P.L. 84-485, Colorado River Storage Project, April 11, 1956; P.L. 79-732, Fish and Wildlife Coordination Act, August 14, 1946; P.L. 93-205, Endangered Species Act of 1973, as amended, December 28, 1973; P.L. 106-392, To Authorize the Bureau of Reclamation to Provide Cost Sharing for the Endangered Fish Recovery Implementation Programs for the Upper Colorado and San Juan River Basins, October 30, 2000, as amended by P.L. 107-375, Dec. 19, 2002; P.L. 109-183, Upper Colorado and San Juan River Basin Endangered Fish Recovery Programs Reauthorization Act of 2005, March 20, 2006. P.L. 111-11, Omnibus Public Land Management Act of 2009, March 30, 2009; P.L. 112-270, Endangered Fish Recovery Programs Extension Act of 2012, January 14, 2013.

COMPLETION DATA: As of September 30, 2015, the Upper Colorado River and the San Juan River Basin Recovery Programs have expended 80 percent of their authorized cost ceiling. The Federal Government has committed 56 percent of its cost-share towards completing the project, the non-Federal sponsors have committed 97 percent, and the Colorado River Storage Project Power revenues have committed 100 percent. Current legislation authorizes funding capital projects for the Upper Colorado River Recovery Implementation Program and the San Juan River Basin Program through FY 2023.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species recovery activities implemented

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's

Priority Goal conservation program

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Fish and Wildlife Management and Development	\$4,351,000	\$4,915,000
Enacted/Request	\$4,351,000	\$4,915,000
Non-Federal	0	0
Prior Year Funds	7,706,316	0
Total Program	\$12,057,316	\$4,915,000
Prior Year Funds/Non-Federal	(7,706,316)	0
Total Reclamation Allotment	\$4,351,000	\$4,915,000

Explanation of Significant Changes in Funding: The increase is due to construction of the Tusher Wash Diversion Dam Fish Barrier.

Total Cost Information*

	Total Estimated Cost ^{1/}	Total to 9/30/15 1/	FY 2016 1/	FY 2017	Balance to Complete 1/
Reclamation	\$117,166,000	\$64,175,400	\$4,351,000	\$4,915,000	\$43,724,600
Non-Federal (States)	104,000,000	102,159,980	0	0	1,840,020
CRSP Revenues	17,000,000	16,993,620	0	0	6,380
Total	\$238,166,000	\$183,329,000	\$4,351,000	\$4,915,000	\$45,571,000

^{*} Includes costs associated with the authorized appropriation ceiling.

Construction Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Fish and Wildlife Management and Development	\$236,312,000	\$238,166,000

METHODOLOGY: The methodology of cost allocation has not been modified.

^{1/}Balance to complete has been adjusted to reflect increased ceiling authorized by P.L. 111-11.

APPROPRIATION CEILING: The current authorizing legislation (P.L. 111-11) expires September 30, 2023.

WORK PROPOSED IN FY 2017:

Fish and Wildlife Management and Development -

<u>San Juan River Basin Program Management</u> - Continues to prepare Capital Improvement Program annual budgets for submission to Reclamation's budget formulation process, transferring Capital Improvement Program funds to appropriate entities, contract administration, and expenditure tracking.

\$50,000

<u>Tusher Wash</u> - Continues planning, design and construction of Tusher Wash Diversion Dam Fish Barrier. Increase is due to the need to maintain the current construction schedule. 2,582,000

Orchard Mesa Irrigation District Canal Automation - Completes construction of the canal automation system in order to efficiently and effectively match river diversions with actual consumptive use demands. Approximately 26,000 acre-feet of conserved water will be redirected to improve instream flows in the Colorado River annually.

2,182,000

<u>Upper Colorado Program Management</u> - Continues tasks such as preparing program budgets, contracting to accomplish various program tasks, contract administration, and expenditure tracking. Continues participation in various recovery program activities to determine best path to each individual species recovery. Continues efforts to address concerns and issues associated with construction of capital projects within the Upper Colorado River Recovery area.

101,000

Subtotal, Fish and Wildlife Management and Development

\$4,915,000

Reclamation Request

\$4,915,000

Fruitgrowers Dam Project

LOCATION: The project is located in western Colorado near the city of Delta, Colorado.

DESCRIPTION/JUSTIFICATION: The project features include Fruitgrowers Dam, Dry Creek Diversion Dam, and Dry Creek Dam. The project conveys irrigation water to approximately 2,700 acres.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902; P.L. 61-289, Advances to the Reclamation Fund, June 25, 1910. The President authorized construction on January 11, 1938.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$41,000	\$31,000
Land Management and Development	62,000	70,000
Facility Operations	75,000	71,000
Facility Maintenance and Rehabilitation	61,000	65,000
Enacted/Request	\$239,000	\$237,000
Non-Federal	0	0
Prior Year Funds	60,185	0
Total Program	\$299,185	\$237,000
Prior Year Funds/Non-Federal	(60,185)	0
Total Reclamation Allotment	\$239,000	\$237,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues tasks necessary to ensure the delivery of project water. Continues the review and approval of reallocations and transfers, drafting and amending water contracts, compliance with contractual obligations, administration and protection of existing water rights, and development of new water rights. \$31,000

Land Management and Development - Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides National Environmental Policy Act compliance in association with public requests to use recreation land and facilities.

70,000

Facility Operations - Continues dam tender training, updating of Standing Operating Procedures, and assisting local entities in preparing and implementing Emergency Action Plans, water supply forecasting and monitoring, and hydrologic database activities. **71,000**

Facility Maintenance and Rehabilitation - Continues scheduled bridge inspections of three Type 1 bridges, inventories, examination of project structures for safety, evaluation of existing dams, reviews of operation and maintenance for facilities operated by water users, preparation of examination reports, instrumentation monitoring, and updating of project records and drawings, geologic and slide monitoring, and annual reporting requirements under the Dam Safety Program.

65,000

Reclamation Request \$237,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Grand Valley Unit Colorado River Basin Salinity Control Program (CRBSCP), Title II

LOCATION: The Grand Valley Unit is located in Mesa County in western Colorado near the confluence of the Gunnison and Colorado Rivers near the City of Grand Junction.

DESCRIPTION/JUSTIFICATION: The Grand Valley Project features include approximately 200 miles of canals and 500 miles of laterals, most of which are earth-lined and support the irrigation needs of the entire valley that encompasses approximately 70,500 acres.

The Grand Valley Unit, which is part of the Grand Valley Project, includes approximately 19 miles of the 55 mile-long federally-owned Government Highline Canal, which is lined with varying materials, such as clay, concrete, and membrane; 139 miles of piped laterals and 19 miles of piped main canal ditches of the non-Federal Price and Stubb Ditches; and 70 miles of piped ditches under the Mesa County Irrigation District and Palisade Irrigation District. These features control about 122,300 tons of salt annually from entering the Colorado River system.

This unit is part of the Colorado River Salinity Control Title II Program. Without the Salinity Program, it is estimated that the current quantified economic damages would be over \$618 million per year for all participating projects. Current measures in place, however, control approximately \$252 million in quantified economic salinity damages to municipal and agricultural water users along the Colorado River. This is a 41 percent reduction in economic damages caused by salinity.

The program legislation requires a 75/25 cost share of operation and maintenance (O&M) costs on the Highline Canal and various federally owned laterals with Mesa County Irrigation District, Palisade Irrigation District, and the Grand Valley Water Users Association. Project stakeholders and partners that share in operation costs relating to salinity control and mitigation include Colorado Division of Wildlife, Colorado Division of Parks and Outdoor Recreation, and Mesa County Land Conservancy.

AUTHORIZATION: P.L. 93-320, Colorado River Basin Salinity Control Act, June 24, 1974; P.L. 98-569, Colorado River Basin Salinity Control Act Amendment, October 30, 1984; and P.L. 104-20, Colorado River Basin Salinity Control Act Amendment, July 28, 1995; P.L. 104-127, Federal Agriculture Improvement and Reform Act of 1996, April 4, 1996.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$476,000	\$133,000
Land Management and Development	127,000	127,000
Facility Operations	1,562,000	1,646,000
Facility Maintenance and Rehabilitation	1,044,000	45,000
Enacted/Request	\$3,209,000	\$1,951,000
Non-Federal	924,000	627,000
Prior Year Funds	496,516	0
Total Program	\$4,629,516	\$2,578,000
Prior Year Funds/Non-Federal	(1,420,516)	(627,000)
Total Reclamation Allotment	\$3,209,000	\$1,951,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues evaluation of Grand Valley Power Plant rehabilitation options required to improve generation and water use efficiency. Continues defending project water rights, administers and develops repayment, water service, excess capacity and lease of power privilege contracts. Continues tasks required to ensure the delivery of project water and benefits, compliance with contractual obligations and investigations, and resolution of unauthorized use. Performs water quality monitoring. Provides technical support for infrastructure modernization and efficiency upgrades, provides technical staff support to address water and power infrastructure modernization needs, identify water efficiency improvement opportunities and assist in the development of financing/cost sharing options. Decrease is due to completion of engineering, construction management, and permitting assistance for construction of the Orchard Mesa Irrigation District canal automation system.

\$154,000 Non-Federal (Upper Colorado River Basin Fund) (21,000)

Subtotal, Water and Energy Management and Development

\$133,000

Land Management and Development - Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land 169,000 resources.

Non-Federal (Upper Colorado River Basin Fund) (42,000)

Subtotal, Land Management and Development

127,000

Facility Operations - Continues reimbursement of costs related to salinity O&M contracts to Grand Valley Water Users Association, Mesa County Irrigation District, and Palisade Irrigation District. Continues reimbursement to Colorado Division of Wildlife, Western Colorado Wildlife Habitat Association, and Colorado State Parks for O&M costs, and management of wildlife mitigation lands for 2,195,000 the salinity unit. (549,000)

Non-Federal (Upper Colorado River Basin Fund)

1,646,000

Subtotal, Facility Operations

Facility Maintenance and Rehabilitation - Continues inspections and maintenance of Type 1 and Type 2 bridges, examination of existing structures to ensure public safety through identification of O&M deficiencies and dam safety concerns, and facilities review of O&M. Decrease reflects the completion of the purchase of two new transformers to replace the current 80-year old transformers.

60,000

Non-Federal (Upper Colorado River Basin Fund)

(15,000)

Subtotal, Facility Maintenance and Rehabilitation

45,000

Reclamation Request

\$1,951,000

Hyrum Project

LOCATION: The project is located in northern Utah.

DESCRIPTION/JUSTIFICATION: The project features include: Hyrum Dam and Reservoir, Hyrum Feeder Canal, Hyrum-Mendon Canal, Wellsville Canal and Pumping Plant, and appurtenant structures. The system stores and diverts water from the Little Bear River to convey supplemental irrigation water to approximately 6,800 acres of privately owned and intensely cultivated land.

AUTHORIZATION: P.L. 73-90, National Industrial Recovery Act of 1933, June 16, 1933.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$30,000	\$30,000
Land Management and Development	148,000	148,000
Facility Operations	130,000	128,000
Facility Maintenance and Rehabilitation	47,000	48,000
Enacted/Request	\$355,000	\$354,000
Non-Federal	0	0
Prior Year Funds	15,630	0
Total Program	\$370,630	\$354,000
Prior Year Funds/Non-Federal	(15,630)	0
Total Reclamation Allotment	\$355,000	\$354,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues oversight and administration of contract repayment. \$30,000

Land Management and Development - Continues land resources management, to include asset inventory system database management, project right-of-way, and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to the National Environmental Policy Act, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. 148,000

Facility Operations - Continues assistance to local governments and emergency management personnel in the development of local Emergency Operating Plans. Continues revisions to project facilities Emergency Action Plans and Standing Operating Procedures. 128,000

Facility Maintenance and Rehabilitation - Continues review of operation and maintenance of project facilities operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

48,000

Reclamation Request \$354,000

Mancos Project

LOCATION: The project is located in Montezuma County in southwestern Colorado.

DESCRIPTION/JUSTIFICATION: The project facilities include Jackson Gulch Dam and Reservoir, and inlet and outlet canals. The project provides a supplemental water supply to approximately 13,000 acres of land. The project also supplies domestic water to the Mancos Rural Water Company, the town of Mancos, and Mesa Verde National Park.

AUTHORIZATION: P.L. 76-398, Water Conservation and Utilization Act of August 11, 1939, as amended by P.L. 76-848, October 14, 1940; P.L. 89-72, Federal Water Project Recreation Act of 1965, amended by P.L. 102-575, October 30, 1992; P.L 106-549, Warren Act Amendment, December 16, 2000.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$58,000	\$31,000
Land Management and Development	37,000	30,000
Facility Operations	111,000	147,000
Facility Maintenance and Rehabilitation	77,000	90,000
Enacted/Request	\$283,000	\$298,000
Non-Federal	13,000	13,000
Prior Year Funds	86,487	0
Total Program	\$382,487	\$311,000
Prior Year Funds/Non-Federal	(99,487)	(13,000)
Total Reclamation Allotment	\$283,000	\$298,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues the administration of various repayment, water service, excess capacity and lease of power privilege contracts. Defends project water rights and monitors water quality. \$31,000

Land Management and Development - Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides National Environmental Policy Act compliance in association with public requests to use recreation land and facilities.

30,000

Facility Operations - Continues operation and maintenance activities for the cost-share recreation facility and associated grounds located at Jackson Gulch Reservoir, and the automated data collection systems. Continues Emergency Action Plan tasks and dam tender training for Jackson Gulch Dam. Increase is due to an increase in the recreation contract operation and maintenance payment (cost-share of recreation expenses with the State of Colorado). \$160,000

Non-Federal (State of Colorado) (13,000)

Subtotal, Facility Operations

147,000

Facility Maintenance and Rehabilitation - Continues inventory, inspection, and maintenance of a Type 1 bridge, instrumentation maintenance and data review, and examination of existing structures to ensure public safety through the identification of O&M deficiencies and dam safety concerns. **90,000**

Reclamation Request \$298,000

Middle Rio Grande Project

LOCATION: The project is located in northern and central New Mexico in Rio Arriba, Los Alamos, Sandoval, Santa Fe, Bernalillo, Valencia, Socorro and Sierra counties.

DESCRIPTION/JUSTIFICATION: The project consists of El Vado Dam and Reservoir, three diversion dams, over 1,000 miles of canals, laterals and drains, 260 miles of the Rio Grande channel, and 57 miles of Low Flow Conveyance Channel (LFCC). The project delivers water for irrigation and human consumption to over one million people, maintains valley drainage, and provides flood protection. Reclamation operates and maintains under contract with the Middle Rio Grande Conservancy District (MRGCD) the three diversion dams, 202 miles of canals, 405 miles of drains, and 580 miles of laterals in order to preserve and protect Federal investments. The natural hydrological effects of the river's flow creates some of the highest sediment loads in the world, which requires ongoing life cycle maintenance on the river channel and LFCC to maintain and ensure Reclamation's ability to deliver water. Project works deliver water to nine tribes and pueblos along the river, as well as a national wildlife refuge. The Middle Rio Grande Project, Endangered Species Collaborative Program component, is included in the America's Great Outdoors (AGO) Rivers Initiative and supports AGO's objectives to conserve, restore, and connect people to the great outdoors.

As a way of reducing the potential for litigation the Middle Rio Grande Endangered Species Collaborative Program (composed of fifteen signatories including: Bureau of Reclamation, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Interstate Stream Commission, New Mexico Department of Game and Fish, New Mexico Attorney General's Office, Pueblo of Santo Domingo, Pueblo of Sandia, Pueblo of Isleta, Pueblo of Santa Ana, Middle Rio Grande Conservancy District, City of Albuquerque, Albuquerque-Bernalillo County Water Utility Authority, Assessment Payers Association of the Middle Rio Grande Conservancy District, and New Mexico Department of Agriculture) established a forum that actively creates, promotes, and provides opportunities for Reclamation's participation in cooperative efforts with Federal and non-Federal partners to preserve, protect, and improve the status of endangered species while also protecting existing water uses and ensuring compliance with all applicable laws.

AUTHORIZATION: P.L. 80-858, The Flood Control Act of 1948, June 30, 1948; P.L. 81-516, The Flood Control Act of 1950, May 17, 1950; P.L. 93-205, Endangered Species Act of 1973, as amended, December 28, 1973; P.L. 109-13, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Tsunami Relief, 2005, May 11, 2005, that authorizes construction, operation, and maintenance of a Silvery Minnow sanctuary; P.L 111-8, Omnibus Appropriations Act, 2009, March 11, 2009.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of non-DOI acres restored, including through partnerships, as specified

in plans or agreements that involve DOI

Performance Measure: Number of threatened and endangered species recovery activities implemented

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$783,000	\$787,000
Land Management and Development	447,000	460,000
Fish and Wildlife Management and Development	11,648,000	13,082,000
Facility Operations	1,282,000	1,299,000
Facility Maintenance and Rehabilitation	9,831,000	10,237,000
Enacted/Request	\$23,991,000	\$25,865,000
Non-Federal	1,425,000	1,425,000
Prior Year Funds	1,269,063	0
Total Program	\$26,685,063	\$27,290,000
Prior Year Funds/Non-Federal	(2,694,063)	(1,425,000)
Total Reclamation Allotment	\$23,991,000	\$25,865,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues support of ongoing litigation, science and technology and maintenance of surface water hydrologic computer model necessary for water delivery, development of activities to enhance water management to stretch water supplies and improve operations by controlling invasive aquatic and riparian plants, and continue activities for compliance with efforts to recover the Rio Grande Silvery Minnow and Southwestern Willow Flycatcher while protecting water uses for compliance with the Endangered Species Act (ESA). Continues support of Native American negotiations. Continues oversight and administration of contracts, repayment, and water rights monitoring.

\$417,000

Continues area office essential management functions, e.g., manager meetings, congressional contacts, policy reviews, and external discussions and contacts.

370,000

Subtotal, Water and Energy Management and Development

\$787,000

Land Management and Development - Continues land resource management tasks, including administration and oversight of contracts, hazardous waste inventories, permits for outgrants and license agreements, inventories of Reclamation rights-of-way, ESA, National Historic Preservation Act, National Environmental Policy Act, and Clean Water Act compliance.

460,000

Fish and Wildlife Management and Development - Continues studies to assess the impact and/or affect Reclamation operation and maintenance and other construction activities (mowing, road grading, equipment repair, etc.) have on the endangered Rio Grande Silvery Minnow and Southwestern Willow Flycatcher. Continues ESA coordination activities with the U.S. Fish and Wildlife Service, New Mexico Department of Game and Fish, and other stakeholders, including Clean Water Act 404/401 environmental coordination with the U.S. Army Corps of Engineers; National Environmental Policy Act review; and design and incorporation of environmental features into river maintenance projects.

4,254,000

Continues support of ESA efforts through acquisition of supplemental non-Federal water, and pumping from the LFCC into the Rio Grande during irrigation season.

5,078,000

Continues ESA efforts through participation in the Middle Rio Grande Endangered Species Collaborative Program. Continues to promote and enable cooperative efforts by Reclamation and other Federal and non-Federal partners and stakeholders to preserve, protect, and improve the status of endangered species (Rio Grande Silvery Minnow and Southwestern Willow Flycatcher) while also protecting existing water uses and ensuring compliance with all applicable laws. Increase is due to additional requirements expected under the new Biological Opinion, including planning and implementation of a robust Adaptive Management Program.

4,500,000

Non-Federal (Collaborative Program partners)

(750,000)

(405.000)

Subtotal, Fish and Wildlife Management and Development

Facility Operations - Continues oversight and coordination of water operations and delivery. Continues data refresh and routine software maintenance of the Upper Rio Grande Water Operations surface water hydrologic computer model and other tools required for increased efficiency and effectiveness of water management and delivery. Continues cost share agreement with Middle Rio Grande Conservancy District for water operations at San Acacia Diversion Dam, El Vado Dam, and river channel flood protection.

1,704,000

Non-Federal (Middle Rio Grande Conservancy District)

Subtotal, Facility Operations

1,299,000

13,082,000

Facility Maintenance and Rehabilitation - Continues maintenance work of the Rio Grande River Channel and the LFCC to deliver water to Elephant Butte Reservoir. Work helps to meet water delivery needs for Rio Grande Compact States and international treaty obligations to Mexico. Ongoing maintenance work includes river data collection, surveying, aerial photography, development of bank protection, and annual sediment removal from the river channel. In addition, maintenance work includes water salvage drains rehabilitation, riprap material replacement, vegetation management, equipment repairs, and road grading to protect Federal investments and the public. The number of priority sites is dynamic. Recurring maintenance, caused by river sediment accumulation, is necessary at approximately six priority sites per year. The Middle Rio Grande river channel is continually monitored, risks evaluated, and repairs prioritized. The site prioritization process is essential to ensuring uninterrupted, efficient water delivery to Elephant Butte Reservoir and risk reduction, mitigation or elimination to the public, property, and the project.

Non-Federal (State of New Mexico)

(270,000)

Continues facility reviews on El Vado Dam (a high hazard dam), the three diversion dams, and over 1,000 miles of canals and laterals. Particular focus will be annual inspections of urbanized canals in the Albuquerque area which pose a risk of life and property loss in the event of failure.

93,000

Subtotal, Facility Maintenance and Rehabilitation

10,237,000

Reclamation Request

\$25,865,000

Moon Lake Project

LOCATION: The project is located in northeastern Utah on the Lake Fork River; a tributary of the Duchesne River located about 140 miles east of Salt Lake City, Utah.

DESCRIPTION/JUSTIFICATION: The project features include: Moon Lake Dam, Yellowstone Feeder Canal, Midview Dam, and Duchesne Feeder Canal. The project provides supplemental irrigation water for approximately 75,256 acres of land in Duchesne and Uintah counties.

AUTHORIZATION: P.L. 73-90, National Industrial Recovery Act of 1933, June 16, 1933.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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Activity	FY 2016 Enacted	FY 2017 President's Budget
Land Management and Development	\$9,000	\$9,000
Facility Operations	52,000	50,000
Facility Maintenance and Rehabilitation	34,000	34,000
Enacted/Request	\$95,000	\$93,000
Non-Federal	0	0
Prior Year Funds	8,949	0
Total Program	\$103,949	\$93,000
Prior Year Funds/Non-Federal	(8,949)	0
Total Reclamation Allotment	\$95,000	\$93,000

WORK PROPOSED FOR FY 2017:

Land Management and Development - Continues administration and compliance activities associated with the administration of project lands, to include adherence to the National Environmental Policy Act, and outgrant and agreement processing. **\$9,000**

Facility Operations - Continues assistance to local area governments and emergency management personnel in the development of local Emergency Operation Plans. Continues revision to project facilities Emergency Action Plans and Standing Operating Procedures.

50,000

Facility Maintenance and Rehabilitation - Continues oversight of operation and maintenance on project facilities operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

34,000

Reclamation Request \$93,000

Newton Project

LOCATION: The project is located in Cache County in northern Utah.

DESCRIPTION/JUSTIFICATION: The project conveys supplemental irrigation water from Newton Reservoir on Clarkston Creek via approximately 10 miles of main canals to the distribution system that supports approximately 2,861 acres of land. The project stabilized and rejuvenated an agricultural area by storing supplemental irrigation water in Newton Reservoir. The reservoir replaced an older privately constructed reservoir of inadequate capacity.

AUTHORIZATION: P.L. 76-398, Water Conservation and Utilization Act, August 11, 1939.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Land Management and Development	\$50,000	\$29,000
Facility Operations	53,000	73,000
Facility Maintenance and Rehabilitation	22,000	22,000
Enacted/Request	\$125,000	\$124,000
Non-Federal	0	0
Prior Year Funds	28,117	0
Total Program	\$153,117	\$124,000
Prior Year Funds/Non-Federal	(28,117)	0
Total Reclamation Allotment	\$125,000	\$124,000

WORK PROPOSED FOR FY 2017:

Land Management and Development - Continues land resources management, to include asset inventory system database management, project right-of-way, and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to the National Environmental Policy Act, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. \$29,000

Facility Operations - Begins the Recreation Management Review (RMR) report for the recreation area at Newton Reservoir. Continues assistance to local area governments and emergency management personnel in the development of local Emergency Operation Plans. Continues revision to project facilities Emergency Action Plans and Standing Operating Procedures. Continues recreation operation for project facilities. Increase is due to the development of the RMR report for the recreation area at Newton Reservoir.

Facility Maintenance and Rehabilitation - Continues review of project facilities operated by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

22,000

Reclamation Request \$124,000

Ogden River Project

LOCATION: The project is located in northern Utah near Ogden and Brigham City.

DESCRIPTION/JUSTIFICATION: Project features include: Pineview Dam and Reservoir, Ogden Canyon Conduit, Ogden-Brigham Canal, South Ogden Highline Canal, and a high-pressure distribution system. The project provides irrigation water to approximately 25,000 acres of land and a supplemental municipal water supply to the city of Ogden.

AUTHORIZATION: P.L. 61-289, Advances to the Reclamation Fund, June 25, 1910; P.L. 68-292, Second Deficiency Appropriation Act for 1924, December 5, 1924.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Land Management and Development	\$218,000	\$218,000
Facility Operations	159,000	149,000
Facility Maintenance and Rehabilitation	107,000	107,000
Enacted/Request	\$484,000	\$474,000
Non-Federal	0	0
Prior Year Funds	18,450	0
Total Program	\$502,450	\$474,000
Prior Year Funds/Non-Federal	(18,450)	0
Total Reclamation Allotment	\$484,000	\$474,000

WORK PROPOSED FOR FY 2017:

Land Management and Development - Continues land resources management, to include asset inventory system database management, project right-of-way, and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to the National Environmental Policy Act, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. \$218,000

Facility Operations - Continues oversight and coordination of flood control operations, automated data collection, reservoir operating plans, and river and reservoir modeling for project facilities. Continues support to local area governments and emergency management personnel in the development of local Emergency Operating Plans and Standard Operating Procedures.

149,000

Facility Maintenance and Rehabilitation - Continues review of project facilities operated by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

107,000

Reclamation Request

\$474,000

Paradox Valley Unit Colorado River Basin Salinity Control Program, Title II

LOCATION: The project is located near Bedrock, in Montrose County, in southwestern Colorado.

DESCRIPTION/JUSTIFICATION: The Colorado River Basin Salinity Control Program Title II (Salinity Program) is among Reclamation's first stream restoration programs. The Salinity Program enhances and protects the quality of water available to users in the United States and Mexico by implementing water quality improvement projects on both public and private lands and facilities. These improvement projects limit economic and environmental damages that salinity causes to water users in Arizona, California, Nevada, and Mexico.

The Paradox Valley Unit intercepts approximately 100,000 tons of salt annually from entering the Dolores River, and disposes of the salt via an injection well. The project provides for the Operation and Maintenance (O&M) of a brine-well field, surface treatment facility, brine injection facility (which includes a 16,000 foot deep well) for salt disposal, associated pipelines and roads, and a seismic network. Project benefits are realized by users of Colorado River water within and outside the Colorado River Basin.

This Project is part of the Colorado River Salinity Control Title II Program. This project is a portion of the overall Salinity Control Program. Without the Salinity Program, it is estimated that the current quantified economic damages would be over \$618 million per year for all participating Colorado River Storage Projects. However, current salinity measures in place control approximately \$252 million in quantified economic damages to municipal and agricultural water users along the Colorado River. This is a 41 percent reduction in economic salinity damages.

AUTHORIZATION: P.L. 93-320, Colorado River Basin Salinity Control Act, June 24, 1974; P.L. 98-569, Colorado River Basin Salinity Control Act Amendment, October 30, 1984; P.L. 104-127, Federal Agriculture Improvement and Reform Act of 1966, authorizes cost sharing in lieu of repayment for the salinity program, April 4, 1996.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species recovery activities implemented

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$73,000	\$70,000
Land Management and Development	34,000	42,000
Fish and Wildlife and Management and Development	1,186,000	287,000
Facility Operations	2,679,000	3,000,000
Enacted/Request	\$3,972,000	\$3,399,000
Non-Federal	1,299,000	1,110,000
Prior Year Funds	514,962	0
Total Program	\$5,785,962	\$4,509,000
Prior Year Funds/Non-Federal	(1,813,962)	(1,110,000)
Total Reclamation Allotment	\$3,972,000	\$3,399,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues funding for essential area manager participation in the formulation, review, performance and oversight of Federal and Reclamation-wide policy, management and program administration activities. Includes participation on teams, addressing new policy and providing guidance. Assures adherence to and support of Federal requirements and Reclamation-wide policy. \$70,000

Land Management and Development - Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. \$56,000 Non-Federal (Basin Funds) (14,000)

Subtotal, Land Management and Development

42,000

Fish and Wildlife Management and Development - Continues funding environmental compliance activities to evaluate alternatives for replacing the deep well injection system. Decrease is due to an anticipated change in contracts and salaried work for National Environmental Policy Act compliance. 383,000

Non-Federal (Basin Funds)

(96,000)

Subtotal, Fish and Wildlife Management and Development

287,000

Facility Operations - Continues activities necessary to deliver salinity control benefits which include normal O&M, preventive maintenance, electrical operation, pump replacement and rehabilitation, and operation of hydraulic and seismic equipment.

4,000,000

Non-Federal (Basin Funds)

(1,000,000)

Subtotal, Facility Operations

3,000,000

Reclamation Request

\$3,399,000

Pine River Project

LOCATION: This project is located in La Plata and Archuleta counties of southwestern Colorado.

DESCRIPTION/JUSTIFICATION: The project features consist of Vallecito Dam and Reservoir which has an active capacity of 125,400 acre-feet of water. The project provides a water supply for the supplemental irrigation of 54,737 acres of land, including 13,000 acres on the Southern Ute Indian Reservation and also provides flood control, recreation, and fish and wildlife facilities.

AUTHORIZATION: P.L. 61-289, Advances to the Reclamation Fund, June 25, 1910; P.L. 68-292, Second Deficiency Appropriation Act for 1924, December 5, 1924; P.L. 89-72, Federal Water Project Recreation Act of 1965, as amended by Title XXVII of P.L. 102-575, October 30, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$61,000	\$15,000
Land Management and Development	133,000	108,000
Facility Operations	234,000	243,000
Facility Maintenance and Rehabilitation	65,000	78,000
Enacted/Request	\$493,000	\$444,000
Non-Federal	0	0
Prior Year Funds	60,357	0
Total Program	\$553,357	\$444,000
Prior Year Funds/Non-Federal	(60,357)	0
Total Reclamation Allotment	\$493,000	\$444,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues lifecycle requirements for review and administration of project repayment contracts to ensure compliance and water quality activities. Decrease is due to reduced water contract administration. \$15,000

Land Management and Development - Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides National Environmental Policy Act compliance in association with public requests to use recreation land and facilities.

108,000

Facility Operations - Continues flood control guidance to the Pine River Irrigation District for operation of Vallecito Reservoir, updating project records, emergency management coordination, updating Standing Operating Procedures, dam tender training, and managing the instrumentation system. **243,000**

Facility Maintenance and Rehabilitation - Continues inventories, inspections, and maintenance of Type 1 bridges, review of operations and maintenance, Safety of Dams follow-up, and examination of existing structures to ensure public safety through the identification of O&M deficiencies and dam safety concerns. **78,000**

Reclamation Request \$444,000

Preston Bench Project

LOCATION: The project is located in southeastern Idaho near the town of Preston.

DESCRIPTION/JUSTIFICATION: The project includes the Mink Creek Canal which supplies irrigation water for over 5,000 acres of highly-developed land in the vicinity of Preston. This canal replaced a privately constructed canal that was threatened by landslides, was costly to maintain, and posed constant financial threat to the water users. The canal water also provides additional water to project users. Water is carried from Mink Creek through the project facilities to Worm Creek, from which it is diverted into privately built laterals and conveyed to project lands.

AUTHORIZATION: P.L. 80-644, An act to authorize the Secretary of the Interior to construct the Preston Bench project, June 15, 1948 (62 Stat. 442).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Land Management and Development	\$4,000	\$4,000
Facility Maintenance and Rehabilitation	8,000	8,000
Enacted/Request	\$12,000	\$12,000
Non-Federal	0	0
Prior Year Funds	3,741	0
Total Program	\$15,741	\$12,000
Prior Year Funds/Non-Federal	(3,741)	0
Total Reclamation Allotment	\$12,000	\$12,000

WORK PROPOSED FOR FY 2017:

Land Management and Development - Continues administration and compliance activities, to include outgrant and agreement processing, associated with the management and development of project lands.

\$4,000

Facility Maintenance and Rehabilitation - Continues review of project facilities operated by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

8,000

Reclamation Request \$12,000

Provo River Project

LOCATION: The project is located on the Provo River in central Utah, supplying irrigation, municipal, and industrial water to northern Utah and south Salt Lake counties.

DESCRIPTION/JUSTIFICATION: The project conveys supplemental water for irrigation of approximately 48,000 acres of farmlands, and municipal water for cities in Salt Lake and Utah counties. Project features include: Deer Creek Dam and Reservoir with an active storage capacity of approximately 152,700 acre-feet. The Deer Creek Power Plant has two generating units with a capacity of 4,950 kilowatts. The power plant is operated by the Provo River Water Users Association under a cost reimbursable contract with Reclamation. The Provo River Project's June Sucker Program component is included in the America's Great Outdoors (AGO) Rivers Initiative, and supports AGO's objectives to conserve, restore, and connect people to the great outdoors.

AUTHORIZATION: P.L. 68-292, Second Deficiency Appropriation Act for 1924, December 5, 1924; P.L. 73-90, National Industrial Recovery Act, June 16, 1933; P.L. 76-260, Reclamation Project Act of 1939, August 4, 1939; Deer Creek Power Plant authorized by the Secretary of the Interior, August 20, 1951.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species (T&E) recovery activities

implemented

Mission Area: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Request
Water and Energy Management and Development	\$285,000	\$288,000
Land Management and Development	360,000	360,000
Fish and Wildlife Management and Development	640,000	645,000
Facility Operations	415,000	416,000
Facility Maintenance and Rehabilitation	38,000	42,000
Enacted/Request	\$1,738,000	\$1,751,000
Non-Federal 1/	870,000	870,000
Prior Year Funds	39,840	0
Total Program	\$2,647,840	\$2,621,000
Prior Year Funds/Non-Federal	(909,840)	(870,000)
Total Reclamation Allotment	\$1,738,000	\$1,751,000

^{1/} Includes Federal cost share other than Water and Related Resources Account.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues tasks to ensure protection of project water rights from the activities of others that may adversely affect project operations. Continues essential management functions. Continues contract repayment administration for projects. \$288,000

Land Management and Development - Continues land resources management, to include asset inventory system database management, project right-of-way, and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to the National Environmental Policy Act, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. Continues recreation management and oversight of the project facilities by the managing entity.

360,000

Fish and Wildlife Management and Development - Continues tasks required by the reasonable and prudent alternative of the Biological Opinion for the operation of the Provo River Project. Continues interagency agreement with multiple cost-share partners prescribed by the June Sucker Recovery Implementation Program. \$1,515,000

implementation i rogram.	Ψ1,515,000
Other Federal (Central Utah Project Completion Act Account)	(200,000)
Other Federal (Utah Reclamation Mitigation Conservation Commission)	(60,000)
Other Federal (Fish and Wildlife Service)	(100,000)
Non-Federal (Central Utah Water Conservancy District)	(200,000)
Non-Federal (State of Utah)	(300,000)
Non-Federal (Provo River Water Users Association)	(10,000)

Subtotal, Fish and Wildlife Management and Development

645,000

Facility Operations - Continues lifecycle operation and maintenance tasks required to maintain delivery of power at Deer Creek Reservoir, as well as operating plans, river and reservoir modeling, and coordination of project facilities. Continues support to local area governments and emergency management personnel in the development of local Emergency Operating Plans and Standing Operating Procedures.

416,000

Facility Maintenance and Rehabilitation - Continues review of operation and maintenance of project facilities operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

42,000

Reclamation Request \$1,751,000

Rio Grande Project

LOCATION: The project is located in southern New Mexico and western Texas.

DESCRIPTION/JUSTIFICATION: Project features include four diversion dams, as well as Elephant Butte and Caballo Dams and Reservoirs. The project conveys approximately 50 percent of the municipal water supply for the City of El Paso, in addition to approximately 60,000 acre-feet of water obligated by treaty to Mexico. Drainage water from project lands provides a supplemental irrigation supply to approximately 18,330 acres in Hudspeth County, Texas. Elephant Butte Power Plant provides efficient and reliable power to municipal, industrial, and Native American tribes through the Western Area Power Administration by maintaining a generating capacity of 27,950 kilowatts that result in an annual generation of 87 million kilowatt-hours. The project conveys irrigation water supply for approximately 155,000 acres in New Mexico and Texas. Transfer of operation and maintenance to local irrigation districts occurred in 1979 and 1980. Transfer of title of the irrigation and drainage system facilities to local water districts occurred in January 1996.

Elephant Butte and Caballo Dams and Reservoirs are operated for power generation, irrigation, recreation, fish and wildlife, and flood control benefits. Reclamation provides continued cooperation with the International Boundary and Water Commission in its administration of the 1906 International Water Treaty with Mexico for ongoing minimum oversight coordination and contract analysis of water rights activities, for irrigation deliveries, updating standing operating procedures, and water scheduling. Reclamation operates and maintains Elephant Butte and Caballo Dams, Percha, Leasburg, Mesilla, and Riverside Diversion Dams, and oversees operations of other project features to protect Federal interests, ensure safe, efficient, and effective long-term operation of the project.

AUTHORIZATION: P.L. 58-104, Rio Grande Reclamation Project, February 25, 1905 (authorized by the Secretary of the Interior on December 2, 1905); P.L. 59-225, Extend Reclamation Act to Texas, June 12, 1906; P.L. 89-665, National Historical Preservation Act, October 15, 1966.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species recovery activities implemented

Mission Area: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Request
Water and Energy Management and Development	\$333,000	\$380,000
Land Management and Development	620,000	623,000
Fish and Wildlife Management and Development	421,000	396,000
Facility Operations	4,530,000	4,005,000
Facility Maintenance and Rehabilitation	1,502,000	2,000
Enacted/Request	\$7,406,000	\$5,406,000
Non-Federal	501,000	483,000
Prior Year Funds	168,244	0
Total Program	\$8,075,244	\$5,889,000
Prior Year Funds/Non-Federal	(669,244)	(483,000)
Total Reclamation Allotment	\$7,406,000	\$5,406,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues technical guidance and assistance in adjudication of water rights in New Mexico and Texas from Elephant Butte Dam to Fort Quitman, Texas; assistance for requests made by city, State, and Federal agencies to dismiss or abate the administrative adjudication before the State Office of Administrative Hearings so that unified adjudication of water rights within the Rio Grande project might be obtained; and assistance in the quiet title claim filed by the Justice Department for the Rio Grande project. Continues to provide support in the United States Supreme Court case filed by Texas against New Mexico and Colorado to protect the Rio Grande project water resources in which the United States has joined. These tasks are required to protect Federal investments and ensure that the project is operated in accordance with State and Federal laws. \$380,000

Land Management and Development - Continues with a formal Geographic Information System program to convert existing files, into electronic format of project boundaries, rights-of-way, acquired and withdrawn lands for a determination of what lands are claimed by Reclamation. Continues recreation and concessionaire reviews at Elephant Butte, Caballo, Leasburg and Percha State Parks. Continues minimal land resources management as outlined in the Resource Management Implementation Plan. Continues project protection against encroachment and resource degradation, providing cultural resource clearances to construction site activities; land management oversight and grazing management for Elephant Butte and Caballo Dams. Continues basic administration required for land contracts for Elephant Butte and Caballo Dams and Mesilla, Leasburg, and Percha Diversion Dams. Continues tasks associated with cultural resources management and National Historic Preservation Act compliance. 623,000

Fish and Wildlife Management and Development - Continues Southwestern Willow Flycatcher, Yellow-billed Cuckoo and Winter Bald Eagle surveys, habitat studies, and environmental clearances for grazing, vegetation management, and licensing activities at Elephant Butte State Park and Caballo State Park to meet Endangered Species Act requirements.

396,000

Facility Operations - Continues safety/health and Continuity of Operations tasks. Continues operations of the Elephant Butte Power Plant and lifecycle maintenance on the Elephant Butte and Caballo Dams infrastructures, water scheduling, releases, and deliveries. Continues power generation, flood control, ongoing minimum oversight coordination, contract analysis of water operation, and Standing Operating Procedures tasks. Completes the Mesilla Diversion Dam rehabilitation. \$4,488,000

Rio Grande Project

Non-Federal (Elephant Butte Irrigation District)	(267,000)
Non-Federal (El Paso County Water Improvement District #1)	(216,000)

Subtotal, Facility Operations

4,005,000

Facility Maintenance and Rehabilitation - Continues bi-annual inspection of bridges in accordance with the National Bridge Inspection Standard on Elephant Butte Dam spillway, Caballo Dam spillway, and Mesilla Diversion Dams. Completes replacement of the Penstock Closing System. Decrease is due to the completed replacement of the penstock closing system.

2,000

Reclamation Request \$5,406,000

Rio Grande Pueblos Project

LOCATION: The project is located on lands of 18 New Mexico Rio Grande Basin Pueblos, located in multiple counties in New Mexico.

DESCRIPTION/JUSTIFICATION: P.L. 111-11, Omnibus Public Land Management Act of 2009, March 30, 2009, authorized \$4 million to conduct a study to assess the condition of the irrigation infrastructure of the Rio Grande Pueblos, and to establish priorities for rehabilitation of the infrastructure. It also authorized up to \$6 million of appropriations per year, for fiscal years 2010 through 2019, to implement projects to design and construct the irrigation infrastructure improvements recommended by the study. At the end of FY 2015, Reclamation received additional funds to prepare the study and the Report to Congress. Reclamation estimates that the draft study will be prepared in FY 2016. Project construction would be contingent on the study's results and the Report to Congress.

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902; Title IX, Section 9106 of P.L. 111-11, Omnibus Public Land Management Act of 2009, March 30, 2009; Indian Self-Determination and Education Assistance Act, 25 U.S.C. 450 (2006).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Request
Water and Energy Management and Development	\$300,000	\$300,000
Enacted/Request	\$300,000	\$300,000
Non-Federal ^{1/}	0	0
Prior Year Funds	100	0
Total Program	\$300,100	\$300,000
Prior Year Funds/Non-Federal	(100)	0
Total Reclamation Allotment	\$300,000	\$300,000

^{1/} There is no cost share requirement for the study.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues implementation of approved infrastructure improvements and activities including environmental review, design, permitting, and construction of prioritized irrigation efficiency projects. \$300,000

Reclamation Request \$300,000

San Luis Valley Project (Closed Basin Division and Conejos Division)

LOCATION: The project is located in southern Colorado.

DESCRIPTION/JUSTIFICATION: Work performed on this project is a collaborative effort of the Closed Basin and Conejos Divisions.

The Closed Basin Division features include 170 salvage wells, 82 observation well sites, 67 monitoring wells, 42 miles of main canal, 115 miles of pipeline laterals, 169 miles of transmission lines, 237 miles of access roads, 22 under-drain manholes, and 18 windbreak area watering systems.

The Conejos Division facilities include the Platoro Dam and Reservoir, which are operated and maintained by the Conejos Water Conservancy District.

The authorized project includes the Conejos Division, which regulates the water supply for 81,000 acres of land irrigated in the Conejos Water Conservancy District, and the Closed Basin Division, which salvages shallow ground water once lost to evapotranspiration in the Closed Basin of San Luis Valley. The water is delivered to the Rio Grande to meet Colorado's water delivery requirements in accordance with the Rio Grande compact among the States of Colorado, New Mexico, and Texas, and the Treaty of 1906, with the Republic of Mexico. The project also conveys water to Alamosa National Wildlife Refuge, Bureau of Land Management's Blanca Wildlife Habitat Area, and for stabilization of San Luis Lake. Russell Lakes Wildlife Management Area is a mitigation feature of the project, but receives no salvaged water.

AUTHORIZATION: P.L. 76-260, Reclamation Project Act of 1939, August 4, 1939 (authorized by the Secretary of the Interior on February 1, 1940); a supplemental finding of feasibility and authorization for Platoro Dam and Reservoir was submitted by the Secretary on March 7, 1949; P.L. 92-514, Reclamation Project Authorization Act of 1972, October 20, 1972, to construct the Closed Basin Division; and P.L. 102-575, Reclamation Projects Authorization and Adjustments Act of 1992, Titles XV and XXIII, October 30, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

1 Togram Financiai Data		
	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$63,000	\$41,000
Land Management and Development	36,000	41,000
Fish and Wildlife Management and Development	224,000	208,000
Facility Operations	3,663,000	3,695,000
Facility Maintenance and Rehabilitation	14,000	15,000
Enacted/Request	\$4,000,000	\$4,000,000
Non-Federal	0	0
Prior Year Funds	153,747	0
Total Program	\$4,153,747	\$4,000,000
Prior Year Funds/Non-Federal	(153,747)	0
Total Reclamation Allotment	\$4,000,000	\$4,000,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues management, oversight, and administration of the project. \$41,000

Land Management and Development - Continues asset inventory, updating, and database management activities. Continues minimum land resources management and environmental compliance. Continues land records administration, licensing, permitting of other non-Federal use of Reclamation managed lands, and oversight of mitigation activities.

41,000

Fish and Wildlife Management and Development - Continues water deliveries to the Alamosa National Wildlife Refuge and the Bureau of Land Management's Blanca Wildlife Habitat Area to meet mitigation requirements. Continues vegetation monitoring and shelter belt (tree) area maintenance, management of Russell Lakes Waterfowl Management Area, and stabilization of San Luis Lake. Continues groundwater monitoring, hydrology, water quality, and maintenance and repair of facilities to meet mitigation requirements.

Facility Operations - Continues upgrade of Programmable Master Supervisory and Control system. Continues water salvage operations. Continues bio-fouling remediation, maintenance, and drilling of replacement wells to regain water production. Continues routine non-reimbursable operation and maintenance activities and routine updates of the Standing Operating Procedures and Emergency Action Plan for Platoro Dam.

3,695,000

Facility Maintenance and Rehabilitation - Continues bridge inspections and annual inspection of Platoro Dam, to include security reviews. 15,000

Reclamation Request \$4,000,000

Sanpete Project

LOCATION: The project is located in central Utah near the towns of Ephraim and Spring City.

DESCRIPTION/JUSTIFICATION: The project conveys irrigation water to approximately 17,746 acres. Project features include Ephraim and Spring City Tunnels.

AUTHORIZATION: P.L. 68-292, Second Deficiency Appropriations Act of 1924 (Fact Finders' Act), December 5, 1924 (43 Stat. 672); Construction was approved by the President on November 6, 1935; P.L. 73-90, National Industrial Recovery Act, June 16, 1933 (the project was constructed under the provisions in the Act).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

1 Togram I mancial Data		
	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$60,000	\$60,000
Facility Maintenance and Rehabilitation	10,000	10,000
Enacted/Request	\$70,000	\$70,000
Non-Federal	0	0
Prior Year Funds	18,484	0
Total Program	\$88,484	\$70,000
Prior Year Funds/Non-Federal	(18,484)	0
Total Reclamation Allotment	\$70,000	\$70,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues the ongoing development and installation of a comprehensive watershed management instrumentation system to improve efficiency and effectiveness of water operations in Sanpete County New monitoring sites will be required as the infrastructure delivering water to the valley expands. \$60,000

Facility Maintenance and Rehabilitation - Continues review of project facilities operated by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

10,000

Reclamation Request \$70,000

Scofield Project

LOCATION: The project is located in central Utah northwest of the city of Price.

DESCRIPTION/JUSTIFICATION: The project provides seasonal and long-term regulation of the Price River and conveys supplemental irrigation water to approximately 26,000 acres of land. The project also provides protection from floods and supports fish propagation. The principal feature of the project is Scofield Dam. Water from Scofield Reservoir is conveyed to project lands by privately built and maintained distribution systems.

AUTHORIZATION: P.L. 76-398, Water Conservation and Utilization Act, August 11, 1939.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

1 Togram I manciai Data		
	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$60,000	\$60,000
Land Management and Development	535,000	455,000
Fish and Wildlife Management and Development	14,000	14,000
Facility Operations	64,000	66,000
Facility Maintenance and Rehabilitation	20,000	20,000
Enacted/Request	\$693,000	\$615,000
Non-Federal	0	0
Prior Year Funds	25,655	0
Total Program	\$718,655	\$615,000
Prior Year Funds/Non-Federal	(25,655)	0
Total Reclamation Allotment	\$693,000	\$615,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues water measurement and accounting activities on project facilities. Continues the ongoing development and installation of a comprehensive watershed management instrumentation system to create more efficient and effective water operations in Carbon County.

\$60,000

Land Management and Development - Continues Resource Management Plan for Scofield Reservoir. Continues land resources management, to include asset inventory system database management, project right-of-way, and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to the National Environmental Policy Act (NEPA), outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project

lands, and administrative reporting. Continues recreation management and oversight of the project facilities by the managing entity.

455,000

Fish and Wildlife Management and Development - Continues data gathering for both NEPA analysis and Endangered Species Act compliance for the Southwest Willow Flycatcher (an endangered species) and Ute Ladies' Tresses (Spiranthes, an endangered flower). **14,000**

Facility Operations - Continues assistance to local governments and emergency management personnel in the development of local Emergency Operating Plans. Continues revision to project facilities Emergency Action Plans and Standing Operating Procedures.

66,000

Facility Maintenance and Rehabilitation - Continues review of operation and maintenance of project facilities operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

20,000

Reclamation Request \$615,000

Strawberry Valley Project

LOCATION: The project is located in north central Utah.

DESCRIPTION/JUSTIFICATION: As a result of an agreement between Strawberry Water Users Association, Central Utah Water Conservancy District, and Reclamation, approximately 61,500 acre-feet of water, per year, from the old Strawberry Valley Project, is now supplied by the Central Utah Water Conservancy District to irrigate approximately 45,000 acres. The project features include Spanish Fork Diversion Dam, Strawberry Power Canal, Strawberry High Line Canal, Spanish Fork Upper Power Plant, Spanish Fork Lower Power Plant and Payson Power Plant. The three power plants have a generating capacity of approximately 4,550 kilowatts.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measures: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$134,000	\$134,000
Land Management and Development	696,000	371,000
Facility Maintenance and Rehabilitation	100,000	100,000
Enacted/Request	\$930,000	\$605,000
Non-Federal	0	0
Prior Year Funds	44,486	0
Total Program	\$974,486	\$605,000
Prior Year Funds/Non-Federal	(44,486)	0
Total Reclamation Allotment	\$930,000	\$605,000

WORK PROPOSED IN FY 2017:

Water and Energy Management and Development - Continues water right tasks to include protection of project water rights from the activities of others that may adversely affect project operations.

Continues management, oversight, and coordination activities for the project.

\$134,000

Land Management and Development - Continues land resources management, to include asset inventory system database management, Geographic Information System activities, and project right-of-way and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to the National Environmental Policy Act, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting.

371,000

Facility Maintenance and Rehabilitation - Continues review of operation and maintenance of project facilities operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

100,000

Reclamation Request \$605,000

Tucumcari Project

LOCATION: The project is located in east-central New Mexico.

DESCRIPTION/JUSTIFICATION: Project features include Conchas Dam and Reservoir (constructed by the U.S. Army Corps of Engineers), Conchas and Hudson Canals, and a distribution and drainage system. Water stored in the Conchas Reservoir, 31 miles northwest of Tucumcari, is conveyed to the Conchas and Hudson Canals. The canals deliver water to the 171 mile distribution system that serves the project lands. Project facilities are operated and maintained by Arch Hurley Conservancy District.

AUTHORIZATION: P.L. 75-477, Amend Tucumcari Project Act, April 9, 1938. The President approved the finding of feasibility on November 1, 1938.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$12,000	\$13,000
Land Management and Development	5,000	5,000
Facility Maintenance and Rehabilitation	9,000	5,000
Enacted/Request	\$26,000	\$23,000
Non-Federal	0	0
Prior Year Funds	9,867	0
Total Program	\$35,867	\$23,000
Prior Year Funds/Non-Federal	(9,867)	0
Total Reclamation Allotment	\$26,000	\$23,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues contract oversight and administration.

\$13,000

Land Management and Development - Continues stewardship and oversight of facilities and lands presently administered by the Arch Hurley Conservancy District. **5,000**

Facility Maintenance and Rehabilitation - Continues oversight, review, and management of the Operation and Maintenance Program, tracking, follow-up on recommendations, and other associated actions.

5,000

Reclamation Request \$23,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Uncompangre Project

LOCATION: The project is located in western Colorado.

DESCRIPTION/JUSTIFICATION: The project features include Taylor Park Dam and Reservoir, which conveys irrigation water to approximately 76,300 acres of land and provides ancillary recreation benefits.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902. The Secretary of the Interior authorized the project on March 14, 1903. Rehabilitation of the project and construction of Taylor Park Dam authorized, November 6, 1935.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species (T&E) recovery activities

implemented

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Program rmanciai Data		
	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$61,000	\$55,000
Land Management and Development	213,000	214,000
Fish and Wildlife Management and Development	575,000	569,000
Facility Operations	109,000	73,000
Facility Maintenance and Rehabilitation	84,000	86,000
Enacted/Request	\$1,042,000	\$997,000
Non-Federal	0	0
Prior Year Funds	150,196	0
Total Program	\$1,192,196	\$997,000
Prior Year Funds/Non-Federal	(150,196)	0
Total Reclamation Allotment	\$1,042,000	\$997,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues water quality monitoring tasks. Continues tasks required to ensure the delivery of project water and benefits including the review and approval of reallocations and transfers, drafting and amending water contracts, compliance with contractual obligations, administration and protection of existing water rights, and development of new water rights.

\$55,000

Land Management and Development - Continues day-to-day land management activities; complying with and administering laws and regulations; execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and the protection of recreation facilities and land resources; provides National Environmental Policy Act compliance in association with public requests to use recreation land and facilities.

214,000

Fish and Wildlife Management and Development - Continues implementation of the Selenium Management Program for the Uncompander Valley including but not limited to: planning, design, construction, administration, and oversight of the lining and efficiency improvements of irrigation water conveyance in the Uncompander Valley. **569,000**

Facility Operations - Continues functional exercises for emergency management. Continues dam tender training, updating Standing Operating Procedures, and supporting external entities in preparing and implementing Emergency Action Plans.

73,000

Facility Maintenance and Rehabilitation - Continues Type 1 and 2 bridge inspections, safety evaluations of existing dams, review of Operation and Maintenance Programs, preparation of examination reports, instrumentation monitoring, and updating of project records and drawings.

86,000

Reclamation Request \$997,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

United States/Mexico Border Issues - Technical Support

LOCATION: The program encompasses the U.S./Mexico border area that falls within the confines of the Upper Colorado Region.

DESCRIPTION/JUSTIFICATION: The signing of the North American Free Trade Agreement and subsequent accelerated growth and development along both sides of the border has created a multitude of resource management issues. Funds are used to provide technical support to Reclamation's U.S./Mexico border coordination effort. Technical teams are assigned as needed by Reclamation's Border Coordination Representative to the Department of the Interior's Field Coordinating Committee. Technical team members are from the regional and area offices of the Upper Colorado Region and the Denver Technical Services Center.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$90,000	\$90,000
Enacted/Request	\$90,000	\$90,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$90,000	\$90,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$90,000	\$90,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide coordination and technical support to Reclamation's U.S./Mexico border coordination effort to facilitate resolution of a multitude of resource management issues that have developed along both sides of the border. Technical teams are assigned as required by Reclamation's Border Coordination Representative to the Department of the Interior Field Coordinating Committee. \$90,000

Reclamation Request \$90,000

Upper Colorado River Operations Program

LOCATION: All areas within the Upper Colorado River Basin.

DESCRIPTION/JUSTIFICATION: The Secretary of the Interior, acting through the Bureau of Reclamation, has a unique role in the management of the Colorado River. The Secretary has both the legal responsibility as water master to manage the lower river, and the statutory responsibility to coordinate river operations between the two basins (upper and lower). Both the Upper and Lower Colorado Regions of Reclamation provide support to the seven Colorado River Basin States and other Colorado River stakeholders in developing and refining new strategies for the coordinated operation of Lakes Powell and Mead. Rapid growth in the southwestern United States has resulted in a significant increase in demand for water of the Colorado River putting additional pressure on the seven Colorado River Basin States and on the Secretary to develop collaborative strategies for water deliveries and the coordinated operation of Colorado River reservoirs, particularly for Lake Powell and Lake Mead. The Upper Colorado Region is involved in the development and implementation of management strategies in support of public policy and the growing concern over water shortages between the two basins, as well as among the individual basin states. Given the interim nature of the coordinated operations guidelines for Lake Powell and Lake Mead (December 2007 Record of Decision), the potential for reconsultation with the Basin States and other appropriate parties should specific reservoir levels be reached during the interim period, and the need to implement these guidelines and refine them through actual operating experience, the level of involvement required by the Secretary is expected to continue. Maintenance and development of Reclamation's Colorado River Simulation System model and Reclamation's Hydrologic Database are also necessary to support these activities.

AUTHORIZATION: P.L. 90-537, the Colorado River Basin Project Act, September 30, 1968; and P.L. 93-205, the Endangered Species Conservation Act, December 28, 1973, as amended.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$270,000	\$270,000
Enacted/Request	\$270,000	\$270,000
Non-Federal	0	0
Prior Year Funds	63,979	0
Total Program	\$333,979	\$270,000
Prior Year Funds/Non-Federal	(63,979)	0
Total Reclamation Allotment	\$270,000	\$270,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues administration of the Colorado River to include the development, refinement, and oversight of operating criteria and guidelines for the Secretary of the Interior's statutory responsibility for coordinated operation of Colorado River reservoirs. Continues consultation and coordination and water accounting between Upper and Lower Colorado Regions and Basin States. Continues to develop and refine tools for water management (control systems, forecasting techniques, remote measurement & monitoring systems) and use them to perform water supply planning studies; to assess future risks to water supply to the seven Colorado River Basin States; to analyze refinements in the operating strategies of Colorado River reservoirs for improved water supply; to refine coordinated operating strategies for drought; and, to evaluate water use and yield in the Upper Colorado River Basin.

Continues to conduct modeling and analysis for and participation in a public process for the five-year review of the Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs, and for the preparation of the Colorado River Annual Operating Plan. Continues environmental compliance tasks.

Continues annual consultation required by law with basin states and other stakeholders to develop the Colorado River Annual Operating Plan. \$270,000

Reclamation Request

\$270,000

Weber Basin Project

LOCATION: The project is located in northern Utah in Davis, Morgan, Summit, Wasatch, and Weber counties.

DESCRIPTION/JUSTIFICATION: The Project conserves and uses stream flows resulting from the natural drainage basin of the Weber River including the Ogden River Basin and its principal tributary to provide for municipal, industrial, irrigation, recreation, and fish and wildlife uses. Wanship, Lost Creek, and East Canyon Dams and Reservoirs regulate the flow of the Weber River. Causey and Pineview Dams and Reservoirs regulate the flow of the Ogden River. Arthur V. Watkins Dam and Reservoir receives water from the Weber River, which is diverted at the Slaterville Diversion Dam below the mouth of Ogden River and conveyed through the Willard Canal.

AUTHORIZATION: P.L. 81-273, Weber Basin Project, August 29, 1949; P.L. 81-335, Rehabilitation and Betterment Act of October 7, 1949.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

1 ogrum 1 muneur Buw	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$429,000	\$586,000
Land Management and Development	543,000	549,000
Facility Operations	815,000	575,000
Facility Maintenance and Rehabilitation	335,000	350,000
Enacted/Request	\$2,122,000	\$2,060,000
Non-Federal	0	0
Prior Year Funds	80,606	0
Total Program	\$2,202,606	\$2,060,000
Prior Year Funds/Non-Federal	(80,606)	0
Total Reclamation Allotment	\$2,122,000	\$2,060,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues a study that will include consideration of the potential impact of climate change on water related projects. Continues water quality coordination and monitoring of project reservoirs. Continues contract repayment administration. Continues tasks to protect project water rights from the activities of others that may adversely affect project operations. Continues management, oversight, and coordination activities for the project. Continues a study that will facilitate and promote the development of real-time monitoring systems, and basin-wide decision support tools.

Land Management and Development - Continues land resources management, to include asset inventory system database management, project right-of-way, and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to the National Environmental Policy Act, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. Continues recreation management and oversight of the project facilities by the managing entity.

549,000

Facility Operations - Continues oversight of flood control operations at East Canyon, Rockport, and Pineview Reservoirs, reservoir operating plans, river and reservoir modeling, and coordination for project facilities. Continues support to local area governments and emergency management personnel in the development and revision of local Emergency Operation Plans and Reclamation's Emergency Action Plans. Continues required repayment contract to Weber Basin Water Conservancy District for costs assigned as non-reimbursable functions of project Operation and Maintenance (O&M).

575,000

Facility Maintenance and Rehabilitation - Continues review of O&M of project facilities operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

350,000

Reclamation Request \$2,060,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Weber River Project

LOCATION: The project is located near Ogden, Utah.

DESCRIPTION/JUSTIFICATION: The project conveys supplemental irrigation water to approximately 109,000 acres of land. Project features include: Echo Dam and Reservoir on the Weber River, and the Weber-Provo Diversion Canal.

AUTHORIZATION: P.L. 61-289, Advances to the Reclamation Fund, June 25, 1910; P.L. 68-292, Fact Finders' Act, December 5, 1924. The President approved the project on January 8, 1927. P.L. 92-500, Clean Water Act, October 18, 1972.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Land Management and Development	\$60,000	\$60,000
Facility Operations	70,000	68,000
Facility Maintenance and Rehabilitation	18,000	18,000
Enacted/Request	\$148,000	\$146,000
Non-Federal	0	0
Prior Year Funds	10,819	0
Total Program	\$158,819	\$146,000
Prior Year Funds/Non-Federal	(10,819)	0
Total Reclamation Allotment	\$148,000	\$146,000

WORK PROPOSED FOR FY 2017:

Land Management and Development - Continues land resources management, to include asset inventory system database management, project right-of-way, and boundary surveys. Continues compliance tasks associated with the administration of project lands, to include adherence to the National Environmental Policy Act, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. Continues recreation management and oversight of the project facilities by the managing entity.

\$60,000

Facility Operations - Continues reservoir operating plans, river and reservoir modeling, and coordination for project facilities. Continues assistance to local governments and emergency management personnel in the development of local Emergency Operating Plans. Continues revision to project facilities Emergency Action Plans and Standing Operating Procedures.

68,000

Facility Maintenance and Rehabilitation - Continues review of operation and maintenance of project facilities operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

18,000

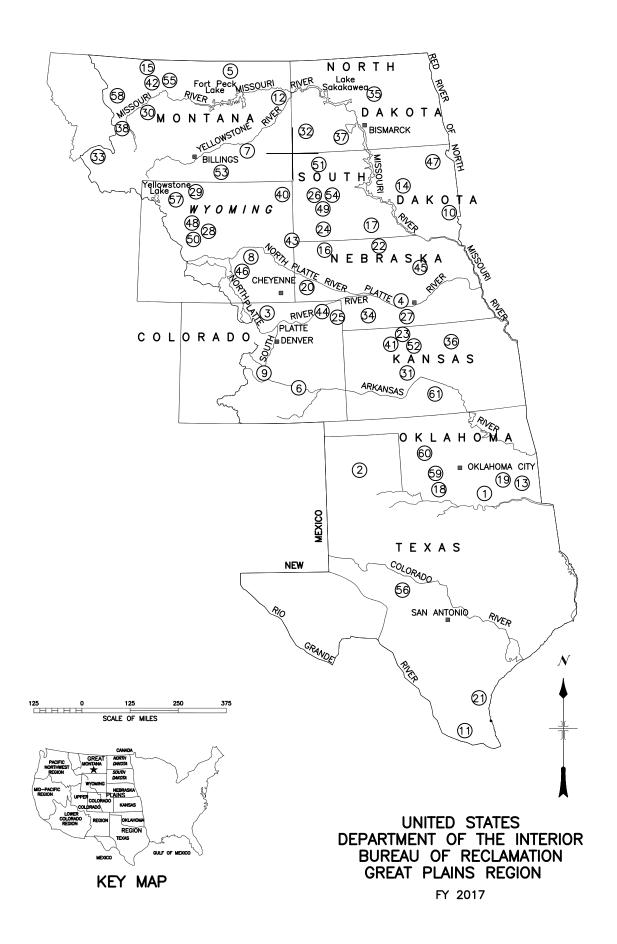
Reclamation Request \$146,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

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GREAT PLAINS REGION PROJECTS AND PROGRAMS MAP KEY

- 1. Arbuckle Project
- 2. Canadian River Project
- 3. Colorado-Big Thompson Project
- 4. Endangered Species Recovery Implementation Program (Platte River)
- 5. Fort Peck Reservation/Dry Prairie RWS
- 6. Fryingpan-Arkansas Project & Arkansas Valley Conduit
- 7. Huntley Project
- 8. Kendrick Project
- 9. Leadville/Arkansas River Recovery Project
- 10. Lewis and Clark RWS
- 11. Lower Rio Grande Water Conservation Project
- 12. Lower Yellowstone Project
- 13. McGee Creek Project
- 14. Mid-Dakota Rural Water Project
- 15. Milk River Project & St. Mary Division
- 16. Mirage Flats Project
- 17. Mni Wiconi Project
- 18. Mountain Park Project
- 19. Norman Project
- 20. North Platte Project
- 21. Nueces River Project

Pick-Sloan Missouri Basin Program

- 22. P-S MBP Ainsworth Unit
- 23. P-S MBP Almena Unit
- 24. P-S MBP Angostura Unit
- 25. P-S MBP Armel Unit
- 26. P-S MBP Belle Fourche Unit
- 27. P-S MBP Bostwick Division
- 28. P-S MBP Boysen Unit

- 29. P-S MBP Buffalo Bill Dam Modification
- 30. P-S MBP Canyon Ferry Unit
- 31. P-S MBP Cedar Bluff Unit
- 32. P-S MBP Dickinson Unit
- 33. P-S MBP East Bench Unit
- 34. P-S MBP Frenchman-Cambridge Division
- 35. P-S MBP Garrison Diversion Unit
- 36. P-S MBP Glen Elder Unit
- 37. P-S MBP Heart Butte Unit
- 38. P-S MBP Helena Valley Unit
- 39. P-S MBP Kansas River Area*
- 40. P-S MBP Keyhole Unit
- 41. P-S MBP Kirwin Unit
- 42. P-S MBP Lower Marias Unit
- 43. P-S MBP Missouri Basin
- 44. P-S MBP Narrows Unit
- 45. P-S MBP North Loup Division
- 46. P-S MBP North Platte Area
- 47. P-S MBP Oahe Unit
- 48. P-S MBP Owl Creek Unit
- 49. P-S MBP Rapid Valley Unit
- 50. P-S MBP Riverton Unit
- 51. P-S MBP Shadehill Unit
- 52. P-S MBP Webster Unit
- 53. P-S MBP Yellowtail Unit
- 54. Rapid Valley Project
- 55. Rocky Boys/North Central Montana RWS
- 56. San Angelo Project
- 57. Shoshone Project
- 58. Sun River Project
- 59. W.C. Austin Project
- 60. Washita Basin Project
- 61. Wichita-Cheney Division
- *Kansas River Area encompasses several dams, including: Almena Unit (23), Armel Unit (25) Bostwick Unit (27), Cedar Bluff Unit (31), Frenchman Cambridge Division (34), Glen Elder Unit (36), Kirwin Unit (41), and Webster Unit (52).

FY 2017 Great Plains Region Budget Summary (\$ in thousands) FY 2017 FY 2016 Other Facility Facility FY 2017 President's Water & Land Fish & Fed/Non-Total Oper. Maint. Request **Project** Budget^{/1} Energy Mgmt. Wildlife Fed Program Arbuckle Project 274 167 238 10 248 Canadian River Project 73 60 219 219 171 11 75 0 Colorado-Big Thompson Project 13,937 590 110 32 12,911 3,113 16,756 4,795 21,551 Crow Tribe Water Rights Settlement 2/ Endangered Species (Platte River) 17,500 19,890 19,890 19.522 39.412 Fort Peck Reservation/Dry Prairie Rural Water System 3,700 4,625 4,625 0 4,625 Fryingpan-Arkansas Project 12.024 50 32 8,196 4,378 12,715 80 12,795 Fryingpan-Arkansas Project/Arkansas Valley Conduit 500 3,000 0 3,000 0 3,000 Huntley Project 57 45 0 63 Kendrick Project 20 58 28 3,646 3,798 88 4,654 3,886 Leadville/Arkansas Project 1,958 1,914 1.914 0 1,914 Lewis and Clark Rural Water System 2.774 2,775 0 2.775 2.775 Lower Rio Grande Water Conservation Project 2,050 50 50 50 2,000 Lower Yellowstone Project 380 364 16 380 380 0 McGee Creek Project 942 26 99 791 984 84 64 1,068 Mid-Dakota Rural Water Project 15 15 15 0 15 Milk River Project/St. Mary Storage Division 235 313 990 158 1.696 798 2,494 2.035 Mirage Flats Project 123 13 87 111 0 111 11 Mni Wiconi Project 12,200 12,000 12,200 0 12,200 Mountain Park Project 25 59 598 44 730 612 686 Norman Project 17 54 287 11 369 30 399 351 North Platte Project 152 10 43 1.087 1.358 442 1,800 1,395 66 Nueces River Project 59 35 912 38 11 704 816 851 Pick-Sloan Missouri Basin Programs: Ainsworth Unit, P-SMBP 179 39 25 11 173 40 213 25 536 15 467 514 25 539 Almena Unit, P-SMBP Angostura Unit, P-SMBP 999 178 715 968 220 1.188 Armel Unit, P-SMBP 376 485 382 104 0 485 Belle Fourche Unit, P-SMBP 1,276 186 84 691 334 1.295 224 1.519 1,259 Bostwick Unit, P-SMBP 1,254 244 118 861 33 542 1.801 1.822 50 Boysen Unit, P-SMB 2.059 69 162 2.103 220 2.323 Buffalo Bill Dam Modification, P-SMBP 2,701 24 2.651 96 2,779 24 2.803 544 5,688 702 6,390 Canyon Ferry Unit, P-SMBP 6,514 100 0 146 4,898 Cedar Bluff Unit, P-SMBP 582 25 531 10 581 25 606 10 Dickinson Unit. P-SMBP 212 0 379 190 **781** 15 796 605 East Bench Unit, P-SMBP 863 181 21 648 854 190 1.044

FY 2017 Great Plains Region Budget Summary									
(\$ in thousands)									
TW 2017									
				FY	2017				
	FY 2016							Other	
	President's	Water &	Land	Fish &	Facility	Facility	FY 2017	Fed/Non-	Total
Project	Budget ^{/1}	Energy	Mgmt.	Wildlife	Oper.	Maint.	Request	Fed	Program
Frenchman Cambridge Unit, P-SMBP	2,400	152	160	13	_	34	2,167	230	2,397
Garrison Diversion Unit, P-SMBP	23,149	16,406	0	0		4	23,528		23,528
Glen Elder Unit, P-SMBP	1,224	14	45	6	1,085	153	1,303		1,348
Heart Butte Unit, P-SMBP	1,278	10	72	0	842	105	1,029	72	1,101
Helena Valley Unit, P-SMBP	183	13	6	0	151	4	174		185
Kansas River Area, P-SMBP	100	0	0	0	100	0	100	0	100
Keyhole Unit, P-SMBP	767	0	198	0	573	4	775	198	973
Kirwin Unit, P-SMBP	444	32	0	5	448	24	509	20	529
Lower Marias Unit, P-SMBP	1,715	46	20	36	1,468	168	1,738	20	1,758
Missouri Basin O&M, P-SMBP	1,297	1,028	0	0		0	1,301	0	1,301
Narrows Unit, P-SMBP	36	0	0	0	36	0	36		41
North Loup Unit, P-SMBP	231	53	30	6		15	210		255
North Platte Area, P-SMBP	5,123	71	0	38	5,056	64	5,229	37	5,266
Oahe Unit, P-SMBP	94	36	0	0	71	0	107	0	107
Owl Creek Unit, P-SMBP	102	6	0	0	87	18	111	0	111
Rapid Valley Unit, Pactola, P-SMBP	195	0	0	0	191	4	195	0	195
Riverton Unit, Pilot Butte, P-SMBP	663	8	0	0	553	13	574	0	574
Shadehill Unit, P-SMBP	544	0	75	0	452	4	531	75	606
Webster Unit, P-SMBP	1,641	12	0	3	486	4	505	0	505
Yellowtail Unit, P-SMBP	7,089	7	0	15	6,140	640	6,802	227	7,029
Rapid Valley /Deerfield Project	69	0	0	0		4	69	26	95
Rocky Boy's/North Central Rural Water	4,625	3,700	0	0		0	3,700		3,700
San Angelo Project	590	38	0	0	562	35	635	20	655
Shoshone Project	801	76	0	0	722	31	829	82	911
Sun River Project	406	131 59	0	22	241	19	413 598	0 25	413 623
W.C. Austin Project	688		164	v	535	4		-	
Washita Basin Project Wishita Project (Change Division)	1,243	80 47	164	0	998 380	8	1,250		1,404
Wichita Project (Cheney Division) Wichita Project (Equus Beds Division)	514 0	4/	100	0	380	4	531 0	80	611
Total W&RR	151,525	34,725	2,222	21,121	88,407	10,612	157,087	31,527	188,614

^{1/} Public Law 114-113, the Consolidated Appropriations Act for 2016 provided Reclamation an additional \$166.3 million in six categories including Western Drought Response (\$100.0 million), rural water (\$47.0 million), and four other categories. At the time of budget preparation, these funds had yet to be distributed by program.

² For FY 2017, the Crow Tribe Water Rights Settlement is funded in the Indian Water Rights Settlements Account, which has its own separate section in the Estimates.

GREAT PLAINS REGION FY 2017 OVERVIEW

	FY 2017 BUDGET FOR WATER AND RELATED RESOURCES						
FY 2016 Enacted 11	Water & Energy	Land Management	Fish & Wildlife	Facility Operations	Facility Maintenance	Total Program	
\$151,525,000	\$34,725,000	\$2,222,000	\$21,121,000	\$88,407,000	\$10,612,000	\$157,087,000	

The 2016 Omnibus provided Reclamation an additional \$166.3 million in six categories including Western Drought Response (\$100 million), rural water (\$47 million), and four other categories. At the time of budget preparation, these funds had yet to be distributed by program.

The Bureau of Reclamation Fiscal Year (FY) 2017 Budget for the Great Plains Region (Region) for Water and Related Resources totals \$157.1 million, an increase of \$5.6 million from 2016 enacted primarily for environmental restoration and endangered species recovery, water quality, and facility operation, rehabilitation and extraordinary maintenance. The Budget reflects the high priority for continuing operation and maintenance (O&M) on existing infrastructure; construction of municipal, rural, and industrial (MR&I) water systems; environmental restoration and endangered species recovery; title transfer; and contract renewals.

The Region encompasses all of North and South Dakota, Kansas, Nebraska, Oklahoma, and most of Montana, Wyoming, Colorado, and Texas and has 56 operating projects. The Region has 80 Reclamation reservoirs including 76 high and significant hazard dams and 65 low hazard dams (mainly diversion dams) with reservoirs that have a total capacity of 23.3 million-acre feet. The reservoirs irrigate over 2,170,000 acres of cropland, about one-fourth of the land area served by all Reclamation reservoirs in the West. The farmland served by Reclamation water produces nearly \$1 billion worth of crops each year in the Region. This budget provides for a sustainable program to operate reservoirs which also provide MR&I water supplies to 2.6 million people in the Region. There are 20 powerplants operated and maintained by the Region, with a total of 42 generating units (three of which are pump generators) with a total generating capacity of 1,002 megawatts of power, which is about 7 percent of Reclamation's total power generating capacity. There are 93 recreation areas providing 1,098,000 acres of land and water recreation. Of the 93 recreation areas in the regions, 81 areas are associated with reservoirs which receive an average of 14 million visits each year.

Challenges facing the Region are rural water system completion, Indian rural water O&M, securing upfront funding by the power customers, and endangered species issues.

Indian rural water O&M requirements continue to increase every year as Indian water system features of Garrison are completed and begin O&M. Water demands and associated costs increase due to Tribal population growth on Garrison and Mni Wiconi. Reclamation is required to fund O&M for Indian rural water features for Garrison and Mni Wiconi and protect the Federal Investment. Specific project O&M amounts are based upon the need to operate and maintain existing infrastructure. The Region continues to work with project sponsors to control O&M costs.

Endangered species activities are becoming a great challenge for the Region. The most significant endangered species issues affecting the Region are the Platte River Recovery Implementation Program, recovery of Pallid Sturgeon on the Lower Yellowstone, and the ongoing informal consultations with the U.S. Fish and Wildlife Service on the operation of Upper Missouri River projects which could result in additional Endangered Species Act requirements.

The **Water and Energy Management and Development** activity budget totals \$34.7 million including \$18.5 million supporting construction of ongoing rural water projects including ongoing MR&I systems – Fort Peck Reservation/Dry Prairie Project and Rocky Boy's/North Central Project (both in Montana), Lewis and Clark (South Dakota, Iowa and Minnesota), and the Garrison Diversion Unit (North Dakota).

The remaining construction ceiling for these four projects totals approximately \$1 billion. Other funding is for non-rural water construction at the Garrison Diversion Unit. The total rural water request (construction and O&M) is approximately 24 percent of the Region's FY 2017 Water and Related Resources (W&RR) budget and is legislatively mandated as "pass through"; i.e., for specified use by project sponsors/partners. Information related to the O&M of rural water is included within the Facility Operations Section of the overview.

The first priority for funding rural water projects is the required tribal O&M component. As directed by Congress, Reclamation has prepared new prioritization criteria to be used in the budget formulation process that were applied in formulating the FY 2017 Budget. The additional \$47.0 million in the 2016 enacted will also be distributed using the prioritization criteria. The criteria include the following categories: 1) financial resources committed; 2) urgent and compelling need; 3) financial need and regional economic impacts; 4) regional and watershed nature; 5) meets water, energy and other priority objectives; and 6) serves Native Americans. The funds requested by Reclamation for rural water construction were formulated using these criteria and in consideration of Reclamation-wide priorities.

Rural water issues have been and continue to be significant in the Region. Authorizing Legislation for rural water projects currently under construction (not including indexing) are:

- Lewis and Clark Rural Water System, authorized July 2000 (P.L. 106-246), for \$214 million
- Fort Peck Reservation/Dry Prairie Rural Water System, authorized October 2000 (P.L. 106-382), for \$175 million
- Increased authorization for Garrison Diversion Unit, authorized December 2000 (P.L. 106-554), for \$628.6 million (includes original and the Dakotas Water Resources Act (DWRA) rural water authorizations)
- Rocky Boy's/North Central Montana Rural Water System, authorized December 2002 (P.L. 107-331), for \$229 million.

Funding of \$3.0 million for Arkansas Valley Conduit (AVC) is included in the budget to continue design activities. The AVC is an authorized feature of the Fryingpan-Arkansas Project and would transport water from Pueblo Dam east to cities along the Arkansas River. As currently authorized, project costs would be 100% financed from Federal appropriations with 65 percent being non-reimbursable and 35 percent reimbursed from other sources, over 50 years, starting after the project is completed.

Funding within for the Colorado Big Thompson (CBT) project, includes \$500,000 for investigating and identifying alternatives to comply with a State of Colorado water clarity standard for Grand Lake that is scheduled to be implemented in 2017...

Reclamation is proposing establishment of an Indian Water Rights Settlements (IWRS) account to assure continuity in construction of the authorized projects and to highlight and enhance transparency in handling these funds. For this reason, the \$12.8 million funding for the Crow Tribe Water Rights Settlement is not included in the Water and Related Resources account in FY 2017 as it was in the FY 2016 Enacted and is instead budgeted within the IWRS account. Details for this project are more fully described under the IWRS tab.

The **Land Management and Development** activity budget totals \$2.2 million for land management activities throughout the Region including recreation management, hazardous waste, integrated pest management, cultural resources, museum property program, compliance with Native American Graves Protection Repatriation Act, and other general land management activities.

The **Fish and Wildlife Management and Development** activity budget totals \$21.1 million, an increase of \$2.4 million over the 2016 enacted. The funding provides for Platte River and Arkansas River Recovery activities, and for operation analysis of Reclamation facilities in the Platte River and Upper Missouri River basins. The increase in funding for the Platte River Recovery Program is critical to meeting Endangered Species Act (ESA) objectives. This is a multi-state watershed improvement project critical to the recovery of endangered species and a collaborative effort between three States, U.S. Fish and Wildlife Service, other environmental organizations, and Reclamation. The Platte River Recovery is included in the America's Great Outdoors (AGO) Rivers Initiative and supports AGO's objectives to conserve, restore, and connect people to the great outdoors.

Other critical ESA projects include structural modifications to allow for fish passage and elimination of fish entrainment on the Lower Yellowstone and the modification of the Milk River Project facilities for the recovery of Bull Trout in the St. Mary Basin. The Assistant Secretary of the Army has agreed to fund up to \$60 million for the Lower Yellowstone fish passage activity.

Funding for ESA work at St. Mary, Milk River Project, includes oversight of planning activities in preparation for the construction of a new canal head works and diversion dam to address fish entrainment and passage for the threatened bull trout, and the development of a fish monitoring plan for the St. Mary facilities as identified in the environmental compliance commitments.

The **Facility Operations** activity budget totals \$88.4 million, a \$460,000 increase from the 2016 enacted. This represents an effort by the Region to better identify the needs of the OM&R program to address the Region's aging infrastructure issues. The facility operations activity provides for ongoing day-to-day operations of facilities in the Region to continue delivery of project benefits. This activity also provides funding for O&M of Indian rural water projects as mandated by Federal law. The FY 2017 rural water request includes \$18.6 million for the operation and maintenance of Tribal systems (Garrison and Mni Wiconi).

The **Facility Maintenance and Rehabilitation** activity budget totals \$10.6 million to provide for replacements, additions and extraordinary maintenance (RAX) items to maintain the infrastructure in operating condition and provides for dam safety activities. The budget includes multipurpose RAX items only and continues to reflect the power RAX items being funded from the power customers.

Prior to FY 2007, up to \$3.5 million was provided annually by the power customers to fund critical maintenance and/or to cover emergencies which happen during the fiscal year. Currently, there is no mechanism in place that guarantees annual funding. The Region has made steady progress in receiving additional up-front funding for power projects, and in FY 2014, over \$31.4 million was provided by the power customers. Power customers funded \$22.5 million in FY 2015 and have agreed to provide \$29.6 million in FY 2016 for power activities. The Region continues to have discussions with the power customers and will be requesting additional funds in FY 2017 for high priority projects.

Planned Accomplishments in FY 2017-- include the delivery of water and generation of power from Reclamation owned and operated facilities. Water infrastructure O&M activities are expected to keep 50 of the Region's 76 High & Significant Hazard Dams and 15 of the 22 Reserved Works Associated

Facilities in good condition, as measured by the Facility Reliability Rating (FRR). Power O&M activities are expected to keep 15 of the Region's 20 powerplants in good condition, as measured by the FRR.

The Region expects continued construction of rural water systems in Montana, and North and South Dakota will increase delivery capability by 3,573 acre-feet of water and add 1,450 cfs-miles of system capacity. The Region also plans to treat 380 acres for the control of invasive plant species, with an expected control rate of 80 percent.

Planned Accomplishments in FY 2016 include the delivery of water from Reclamation owned and operated facilities. Water infrastructure O&M activities are expected to keep 50 of the Region's 76 High & Significant Hazard Dams and 15 of the 22 Reserved Works Associated Facilities in good condition, as measured by the Facility Reliability Rating (FRR). Power O&M activities are expected to keep 15 of the Region's 20 powerplants in good condition, as measured by the FRR.

The Region expects that continued construction of rural water systems in North and South Dakota will increase delivery capability by 1,240 acre-feet of water and add 1,541 cfs-miles of system capacity. The Region also plans to treat 380 acres for the control of invasive plant species, with an expected control rate of 80 percent.

Accomplishments in FY 2015 included the delivery of water from Reclamation owned and operated facilities. Water infrastructure O&M activities resulted in keeping 58 of the Region's 76 High & Significant Hazard Dams and 15 of the 22 Reserved Works Associated Facilities in good condition, as measured by the Facility Reliability Rating (FRR). Power O&M activities achieved 18 of the Region's 20 powerplants in good condition, as measured by the Facility Reliability Rating (FRR). The Region oversaw construction of rural water systems in Montana, North and South Dakota that increased delivery capability by 2,498 acre-feet of water and added 1,050 cfs-miles of system capacity. The Region also treated 874 acres for the control of invasive plant species.

Arbuckle Project

LOCATION: This project is located in Murray and Garvin Counties in south central Oklahoma.

DESCRIPTION/JUSTIFICATION: The Arbuckle Project regulates flows of Rock Creek, a tributary of the Washita River, in south central Oklahoma. The principal features of the project are Arbuckle Dam and Reservoir, Wynnewood Pumping Plant, and the 17.87-mile Wynnewood Aqueduct. The Arbuckle Master Conservancy District and the National Park Service manage the project.

AUTHORIZATION: P.L. 87-594, Arbuckle Project, August 24, 1962.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Ratings

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$67,000	\$67,000
Facility Operations	164,000	167,000
Facility Maintenance and Rehabilitation	43,000	4,000
Enacted/Request	\$274,000	\$238,000
Non-Federal	10,000	10,000
Prior Year Funds	0	0
Total Program	\$284,000	\$248,000
Prior Year Funds/Non-Federal	(10,000)	(10,000)
Total Reclamation Allotment	\$274,000	\$238,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide support to project partners and beneficiaries for the coordination, management, and implementation of water conservation plans and water resources management strategies. Continues the administration of Reclamation water contracts and reviews for contract compliance. \$77,000

Non-Federal - Arbuckle Master Conservancy District

(10,000)

Subtotal, Water and Energy Management and Development

\$67,000

Facility Operations - Continues reimbursement to the operating entity, Arbuckle Master Conservancy District, for joint operations costs allocated to flood control and fish and wildlife. Continues miscellaneous flood control, cultural resources related activities, emergency management planning, reviewing and updating the project Standing Operating Procedures, dam operator training, and emergency exercise program activities. Also, continues funding for ongoing resource management activities related to facility operations, including hydromet monitoring support and reservoir data reporting. 167,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. Decrease is due to a dive exam that is not required in FY 2017.

4,000

Reclamation Request \$238,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Canadian River Project

LOCATION: This project is located in Hutchinson, Moore, and Potter Counties in northwest Texas.

DESCRIPTION/JUSTIFICATION: The principal structure of the Canadian River Project is Sanford Dam, located approximately 37 miles northeast of Amarillo on the Canadian River. The dam impounds water in Lake Meredith. The project provides water to approximately 800,000 people in the 11 member cities of the Canadian River Municipal Water Authority.

AUTHORIZATION: P.L. 81-898, Canadian River Project, December 29, 1950.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's

Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$73,000	\$73,000
Fish and Wildlife Management and Development	11,000	11,000
Facility Operations	75,000	75,000
Facility Maintenance and Rehabilitation	12,000	60,000
Enacted/Request	\$171,000	\$219,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$171,000	\$219,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$171,000	\$219,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide support to project partners and beneficiaries for the coordination, management, and implementation of water conservation plans and water resources management strategies. Continues the administration of Reclamation water contracts and reviews for contract compliance. \$73,000

Fish and Wildlife Management and Development - Continues endangered species activities associated with the Arkansas River Shiner/Peppered Chub within the Canadian River Basin. **11,000**

Facility Operations - Continues ongoing activities which encompass emergency management planning, reviewing and updating the project Standing Operating Procedures, dam operator training, and emergency exercise program activities. Continues ongoing resource management activities related to facility operation, including hydromet monitoring support and reservoir data reporting.

75,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. Continues landslide inspections to ensure public safety and compliance with Federal/State Code requirements. Increase is due to dive and toe drain exams at Sanford Dam which are required in FY 2017.

60,000

Reclamation Request \$219,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Colorado-Big Thompson Project

LOCATION: This project is located in Boulder, Grand, Larimer, Logan, Morgan, Sedgwick, Summit, Washington, and Weld Counties in Northeastern Colorado.

DESCRIPTION/JUSTIFICATION: The Colorado-Big Thompson Project diverts approximately 260,000 acre-feet of water annually from the Colorado River headwaters on the western slope of the Rocky Mountains for distribution to eastern slope project lands. The Northern Colorado Water Conservancy District apportions the water used for irrigation to more than 120 ditch and reservoir companies, and municipal and industrial water to 30 cities and towns. Electrical energy is produced by six powerplants with an installed capacity of 218,000 kilowatts. The major features on the western slope include Green Mountain Dam and Powerplant, Granby Dam and Farr Pumping Plant, Shadow Mountain Reservoir, and Willow Creek Dam and Pumping Plant. Water is diverted from the western slope to the eastern slope through the Alva B. Adams Tunnel. The major features on the eastern slope include Mary's Lake Dikes and Powerplant, Olympus Dam and Estes Powerplant, Pole Hill Powerplant and Canal, Rattlesnake Dam and Tunnel (Pinewood Lake), Flatiron Dam and Powerplant, Big Thompson Powerplant, Carter Lake and Reservoir, and Horsetooth Dam and Reservoir.

AUTHORIZATION: P.L. 61-289, Advances to the Reclamation Fund, June 25, 1910 (Colorado-Big Thompson Project authorized by a finding of feasibility by the Secretary of the Interior, approved by the President on December 21, 1937); and P.L. 68-292, Second Deficiency Appropriation Act for 1924 (Fact Finder's Act), December 5, 1924.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Celebrating and Enhancing America's Great Outdoors; Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Protect America's Landscapes

Performance Measure: Percent of baseline acres infested with invasive plant species that are controlled

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$590,000	\$590,000
Land Management and Development	100,000	110,000
Fish and Wildlife Management and Development	17,000	32,000
Facility Operations	12,934,000	12,911,000
Facility Maintenance and Rehabilitation	296,000	3,113,000
Enacted/Request	\$13,937,000	\$16,756,000
Non-Federal	2,902,000	4,795,000
Prior Year Funds	0	0
Total Program	\$16,839,000	\$21,551,000
Prior Year Funds/Non-Federal	(2,902,000)	(4,795,000)
Total Reclamation Allotment	\$13,937,000	\$16,756,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide assistance to irrigation districts through water conservation planning and implementation of conservation plans, conservation information, and demonstration of innovative conservation technologies. Funds will also be used for a water quality study on Grand Lake. \$640,000

Non-Federal Participation - Northern Colorado Water Conservancy District and State Agencies

(50,000)

Subtotal, Water and Energy Management and Development

\$590,000

Land Management and Development - Continues renovation and replacement of recreation facilities to provide facilities that comply with health, safety, and accessibility standards. 210,000

Non-Federal Participation - Larimer County Parks and Open Lands Department and Estes Valley Recreation and Parks District (100,000)

Subtotal, Land Management and Development

110,000

Fish and Wildlife Management and Development - Continues coordination of activities associated with conservation, enhancement, development and restoration of fish and wildlife populations and their habitats.

32,000

Facility Operations - Continues operation and maintenance, and management of infrastructure required for continued delivery of project benefits. Includes Reclamation's portion of operating expenses for transferred facilities (i.e., operation and maintenance is performed by the District, but title to the facilities is retained by the United States). Continues operations to benefit endangered species while continuing to deliver other project benefits. Continues water scheduling and administration duties. Continues land

resources management, recreation management, environmental compliance, and cultural resources activities related to project operations. 14,368,000

Non-Federal - Northern Colorado Water Conservancy District Partnership (1,457,000)

Subtotal, Facility Operations

12,911,000

Facility Maintenance and Rehabilitation –Continues Dille Diversion Structure Sand Sluice Replacement and Green Mountain Facilities Rehabilitation Access Road and Drainage System. Continues facility examinations to ensure structural integrity relating to safe and reliable operations of the structures, and for inspection of bridges to ensure public safety and compliance with Federal/State code requirements. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions, and extraordinary requirements. Increase due to Dille Diversion Structure Sand Sluice Replacement.

6,301,000

Non-Federal – Includes Flatiron Air Cooler Replacement Units 1 and 2, Pole Hill penstock joint packing replacement, CBT unit vibration monitoring addition, Mary's Lake turbine runner and wear ring replacement, Green Mountain penstock reline, and Estes work platforms for penstock butterfly valves.

(3,188,000)

Subtotal, Facility Maintenance and Rehabilitation

3,113,000

Reclamation Request

\$16,756,000

Endangered Species Recovery Implementation Program(Platte River Recovery Implementation Program)

LOCATION: This activity is located in the Platte River Basin in Colorado, Nebraska, and Wyoming.

DESCRIPTION/JUSTIFICATION: In late 2006, the Governors of Colorado, Nebraska and Wyoming and the Secretary of the Interior entered into the Platte River Recovery Implementation Program (Program). The Program is a collaborative basin-wide program for endangered species in the Central Platte River in Nebraska. The Program addresses habitat for four species: the Whooping Crane, Piping Plover, Interior Least Tern, and Pallid Sturgeon. Under the Program, Reclamation received significant and essential compliance under the Endangered Species Act (ESA) for continued operations of the Colorado-Big Thompson and North Platte projects which supply water to Colorado, Nebraska, and Wyoming irrigators and municipalities. The Program, which began January 1, 2007, was authorized at \$317 million, with the Federal share being \$157 million (October 1, 2005 price levels). The Program requires that the Federal government provide 50 percent of the Program contributions, with the States providing at least 50 percent of the contributions (\$30 million cash and \$130 million in kind or cashequivalent contributions).

P.L. 110-229 authorized the Secretary of the Interior, through the Bureau of Reclamation, and in partnership with the States of Wyoming, Nebraska, and Colorado, other Federal agencies, and other non-Federal entities to participate in the implementation of the Program for endangered species in the Central Platte River Basin and to modify Reclamation's Pathfinder Dam. No Federal appropriations were required to modify Pathfinder Dam. Program activities include the acquisition of lands and water and contracting for habitat restoration projects.

The Program is included in the America's Great Outdoors (AGO) Rivers Initiative and supports AGO's objectives to conserve, restore, and connect people to the great outdoors.

AUTHORIZATION: P.L. 93-205, Endangered Species Act of 1973, December 28, 1973, as amended; P.L. 110-229, Consolidated Natural Resources Act of 2008, Title V, Sec. 515, Platte River Recovery Implementation Program and Pathfinder Modification Project Authorization, May 8, 2008.

COMPLETION DATA: The first increment of this program is scheduled for completion during FY 2020. As of September 30, 2015, the project was approximately 60 percent complete, as financially determined. The Federal government has committed 60 percent of its cost share towards completing the project and the States have committed 60 percent at October 1, 2014, price levels.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Number of threatened and endangered species recovery activities

implemented.

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Fish and Wildlife Management and Development	\$17,500,000	\$19,890,000
Enacted/Request	\$17,500,000	\$19,890,000
Non-Federal	17,122,000	19,522,000
Prior Year Funds	0	0
Total Program	\$34,622,000	\$39,412,000
Prior Year Funds/Non-Federal	(17,122,000)	(19,522,000)
Total Reclamation Allotment	\$17,500,000	\$19,890,000

Total Recovery Implementation Program Cost Information*

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation .11/2	\$174,435,185	\$105,309,074	\$17,122,000	\$19,522,000	\$32,482,111
Non-Federal	177,810,900	105,309,074	17,122,000	19,522,000	35,857,826
Total	\$352,246,085	\$210,618,148	\$34,244,000	\$39,044,000	\$68,339,937

^{*} Includes costs associated with the authorized appropriation ceiling.

Recovery Implementation Cost Allocation and Methodology

Allocation	FY 2014
Fish and Wildlife	\$352,246,085
Total	\$352,246,085

METHODOLOGY: All costs are assigned as non-reimbursable and are based on final indexed values as of October 1, 2014. Indexing has not been computed for the out years based on the indexing methodology approved by Reclamation and the Governance Committee.

APPROPRIATION CEILING: Appropriations authorized are \$157,140,000 (October 2005 price levels per the Attachment I to the Program Document (Finance Document). At October 2014 price levels, the indexed portion of the Federal ceiling is \$174,435,185; the indexed portion of the non-Federal ceiling is \$177,810,900; with a total indexed ceiling of \$352,246,085. This authorization is adequate to cover the project as currently authorized.

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development - Continues implementation of the Platte River Recovery Implementation Program to provide ESA compliance for Reclamation projects in the North and South Platte Basins. Activities planned for this Program for 2017 include the following:

Does not include oversight activities which do not apply towards the ceiling. Total estimated cost includes indexing through October 1, 2014.

² Of the Federal funds received to date \$17,900,000 is specifically for the J2 Water Service Contract. All Federal funds must be appropriated to the J2 Water Service Contract before the project sponsor can award a construction contract.

- J-2 Water Service Contract Funds will be allocated and obligated to meet the Federal share of Program costs under the J-2 Water Service Contract (Contract), which is the most urgent and highest priority project for the program. In July 2013, the Program, the State of Nebraska (Nebraska), and the Central Nebraska Public Power & Irrigation District (CNPPID) entered into the Contract in order for CNPPID to provide water service to the Program and Nebraska from the proposed J-2 Reservoir Project. Funding the Federal share of Program costs under the Contract is important as the Program will receive water service to reduce shortages to U.S. Fish & Wildlife Service target flows by approximately 30,000 acre-feet (af) per year. The Federal share of Program costs under the Contract (30,000 af) represents approximately 60 percent of the overall Program Milestone related to water and shortage reductions to target flows. The Milestone related to water is the only Milestone yet to be achieved by the end of the Program's First Increment. In order for the Program to be ultimately successful and for this essential Milestone to be accomplished, Reclamation must fund its share of Contract costs.
- Funds will provide for Reclamation's participation in the Program which includes administration and oversight.
- Funding will provide for Program implementation and management by the Program Executive Director and staff. The Executive Director and staff, under the oversight and direction of the Governance Committee, are responsible for the day-to-day activities of Program implementation, including oversight and review of work progress for ongoing Program work conducted by contractors and consultants. The Executive Director's Office also provides administrative and other support services and public outreach for the Program, as well as acquiring insurance for representatives of the Governance Committee, Program Advisory Committees, and the Executive Director's Office for certain actions which will be undertaken through Program implementation. Reimbursement is also provided to the Nebraska Community Foundation which acts as the Program's financial manager and contracting agent.
- Funding will provide for the implementation of Water Action Plan activities, which include:
 - o Increasing the active channel capacity of the North Platte River downstream of Lake McConaughy, including cost sharing with the Platte Valley and West Central Weed Management Area to clear biomass from the North Platte River channel between Kingsley Dam and Chapman, Nebraska.
 - O Continuation of the Program's participation in a water service agreement with the State of Nebraska and the CNPPID for water from the proposed J-2 Reservoir Project.
 - o Continued exploration and potential acquisition of additional water through groundwater recharge, groundwater management, water leasing, and water management incentives.
- Funding will provide for the continued implementation of Program Land Plan activities. The Program currently has a direct interest in over 10,000 acres of land for habitat purposes, and is responsible for the payment of property taxes and other annual Land Interest Holding Entity fees pursuant to the Program Document. As a landowner and good steward of Program lands, the Program is responsible for basic land operation and maintenance activities, which include:
 - o Road, fence, and building maintenance.
 - o Noxious weed control and mowing.
 - o Agricultural input costs for share cropping agreements including seed, fertilizer and herbicide application, crop insurance, etc.

Endangered Species Recovery Implementation Program (Platte River Recovery Implementation Program)

- Oversight of grazing and cropland leases.
- o Public access management by the Nebraska Game and Parks Commission.
- Funding will allow the Program to implement, as required, the Adaptive Management Plan (AMP)/Integrated Monitoring & Research Plan (IMRP) throughout the First Increment. AMP/IMRP activities conducted on an annual basis include:
 - The annual monitoring of whooping cranes during the spring and fall migration seasons in order to track the number of cranes which utilize the Central Platte River and the type of habitats they utilize.
 - O Annual interior least tern and piping plover monitoring, which is conducted May through August. The monitoring includes the collection of data at nest sites, conducting independent observer counts on Program associated habitats to evaluate techniques used to monitor tern/plover adults, nests, chicks, and fledglings, the banding of tern and plover chicks and adults, and the documentation of habitat conditions on the Central Platte River
 - o Annual geomorphology/in-channel vegetation monitoring, which collects data related to river channel transects including channel profile and vegetation surveys.
 - o The acquisition of annual LiDAR/aerial photography which provides information for the implementation of the AMP/IMRP.
 - o Flow-sediment-mechanical/mechanical creation and maintenance activities, which are target species habitat restoration and maintenance activities on Program lands. These activities include the creation and maintenance of on and off-channel habitat for interior least terns, piping plovers, and whooping cranes. Individual actions include tree clearing, construction of in-channel nesting islands, channel disking, herbicide application, prescribed burns and seeding.
 - Securing site-specific U.S. Army Corps of Engineers Individual Permits for AMP/IMRP management actions, including island building, vegetation clearing, and channel widening.
 - Operation and maintenance of the Program's Database Management System, which
 houses and manages all Program administrative and technical data and is used by the
 Executive Director's Office, the Governance Committee, and the Program Advisory
 Committees.
 - o The operation and maintenance of streamgages, which provide real-time water flow data to the Program, in addition to providing data for testing the Program's priority hypotheses under the AMP/IMRP.
 - O Completing habitat availability assessments, which provides the Program with data related to the number of in-channel and off-channel acres of "suitable" nesting habitat for terns/plovers, and the number of acres available to whooping cranes for roosting and foraging habitat.
 - o Implementation of sediment augmentation and short duration high-flow activities.
- Funding will provide for the AMP Independent Science Review activities, which include:
 - O Providing stipend and expenses for the members of the Program's Independent Scientific Advisory Committee, who by charter are to advise the Governance Committee and Executive Director, provide independent opinions on the design of the AMP/IMRP's, review scientific information collected and provide their opinion on the results, respond to specific scientific questions, and advise the Governance Committee and Executive Director on the need for peer review.
 - o The peer review of Program scientific documents.
 - o The publication of Program science-related document manuscripts.

Endangered Species Recovery Implementation Program (Platte River Recovery Implementation Program)

The Platte River Recovery Implementation Program is included in the AGO Rivers Initiative and supports AGO's objectives to conserve, restore, and connect people to the great outdoors. \$39,412,000

Non-Federal (States of Wyoming, Colorado, and Nebraska) (

(19,522,000)

Subtotal, Fish and Wildlife Management and Development

\$19,890,000

Reclamation Request

\$19,890,000

Fort Peck Reservation/Dry Prairie Rural Water System

LOCATION: The Fort Peck Reservation (Reservation) and Dry Prairie Rural Water Authority (Dry Prairie) are located in northeastern Montana, and include a large portion of Roosevelt and Valley counties, and all of Daniels and Sheridan counties.

DESCRIPTION/JUSTIFICATION: The Reservation is approximately 100 miles long by 40 miles wide and is bound on the south by the Missouri River. The northern boundary is about 20 miles south of the Canadian border. The Reservation is home to the Assiniboine and Sioux Tribes (Tribes). The total service area population in 1990 was 24,829 leading to a 2030 projected population of 27,435. There are 580,000 gallons per day allowed for livestock. Water will also be provided to a large number of commercial users. Commercial users, such as hotels, motels, hospitals, municipal parks, schools, and manufacturing businesses are usually the largest water users. Most of the projected population on the Reservation (population 16,995) lives along the Missouri River in or around the towns of Wolf Point, Poplar, Brockton, Fort Kipp, Oswego, and Frazer, Montana. Towns outside of the Reservation (population 10,439) which would be served by the Dry Prairie Rural Water System are Glasgow, Scobey, Plentywood, and Culbertson, Montana.

Groundwater from shallow alluvial aquifers is currently the primary water source for the municipal systems. The quality of groundwater throughout the Reservation and Dry Prairie service area is generally poor with concentrations of iron, manganese, sodium, sulfates, bicarbonates, and total dissolved solids above recommended standards. The regional rural water project will provide for a single water treatment plant located on the Missouri River, near Wolf Point, Montana, and will distribute water through 3,200 miles of pipeline. The water treatment plant is designed to have a capacity for delivering up to 13.6 million gallons of water per day to the water distribution system.

AUTHORIZATION: P.L. 106-382, The Fort Peck Reservation Rural Water System Act of 2000, October 27, 2000, as amended; P.L. 113-76, Consolidated Appropriations Act, 2014, January 17, 2014.

COMPLETION DATA: As of September 30, 2015, Fort Peck Reservation Dry Prairie Rural Water System was approximately 58 percent complete, as financially determined. The Federal Government has committed 52 percent of its cost-share towards completing the project; the non-Federal sponsor has committed 85 percent.

Across the country, State, local and Tribal governments are taking a greater leadership role in water resources investments, including financing projects. Constrained Federal budgets do not preclude non-Federal parties from moving forward with important investments in water resources infrastructure and the Department stands ready to support that effort.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's

Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$3,700,000	\$4,625,000
Enacted/Request	\$3,700,000	\$4,625,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$3,700,000	\$4,625,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$3,700,000	\$4,625,000

Total Cost Information

	Total Estimated	Total to	EW 2016	EV 2017	Balance to
	Cost	9/30/15	FY 2016	FY 2017	Complete
Reclamation	\$301,515,000	\$156,626,904	\$3,700,000	\$4,625,000	\$136,563,096
Non-Federal	28,242,000	23,675,599	0	0	4,566,401
Total	\$329,757,000	\$180,302,503	\$3,700,000	\$4,625,000	\$141,129,497

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Municipal and Industrial	\$330,852,000	\$329,757,000
Total	\$330,852,000	\$329,757,000

METHODOLOGY: The methodology of the cost allocation has not been modified from last year.

APPROPRIATION CEILING: P.L. 106-382 authorized the appropriation of \$175,000,000. At October 2016 price levels, the indexed portion of the Federal ceiling is \$301,515,000; the indexed portion of the non-Federal ceiling is \$28,242,000; with a total indexed ceiling of \$329,757,000. This authorization is adequate to cover the project as currently proposed.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Funding provides for activities of the Tribes and the Water Authority. The Tribes will construct the main supply pipeline beside U.S. Highway 2 north that connects existing mainlines east of the Water Treatment Plant, supplying water to northern Reservation and Dry Prairie service areas. The Tribes will continue the planning, design and construction of branch lines to complete service to rural on-reservation customers. Dry Prairie Rural Water sponsors will continue planning and designing and constructing pipeline branch lines on the east and west end of the project boundary.

Reclamation Request \$4,625,000

SEE APPENDIX FOR: Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Fryingpan-Arkansas Project

LOCATION: This project is located in Bent, Chaffee, Crowley, Eagle, El Paso, Fremont, Kiowa, Lake, Otero, Pitkin, Prowers, and Pueblo Counties in southeastern Colorado.

DESCRIPTION/JUSTIFICATION: The Continental Divide separates the Fryingpan-Arkansas Project into two distinct areas: the western slope, located within the boundaries of the White River National Forest; and the eastern slope in the Arkansas River Valley. The project consists of Ruedi Dam and Reservoir, Sugarloaf Dam, Turquoise Reservoir, Twin Lakes Reservoir, Pueblo Reservoir, Mt. Elbert Forebay Dam and Reservoir, North and Southside Collection Systems, Charles H. Boustead Tunnel, and the Mt. Elbert Pumped-Storage Powerplant and Switchyard. The 16 diversion structures divert water from the west slope to the east slope. Diversions, together with available water supplies in the Arkansas River Basin to the east slope, provide an average annual water supply of 69,200 acre-feet (af) for irrigation of 280,600 acres in the Arkansas Valley and an annual supply of 41,000 af of water for use in several eastern slope municipalities (20,100 af to Fountain Valley Conduit, 8,040 af to Pueblo, and the remainder to other valley cities and towns which have requested project water). The two pump/generator units at Mt. Elbert Pump-Storage Powerplant and Switchyard have an installed capacity of 200,000 kilowatts and a pumping capacity of 175,000 horsepower.

AUTHORIZATION: P.L. 87-590, Fryingpan-Arkansas Project, August 16, 1962, as amended.

PERFORMANCE IMPROVEMENT: This project is aligned with Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Celebrating and Enhancing America's Great Outdoors; Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies; and Powering Our Future and Responsible Use of the Nation's Resources

Goal: Protect America's Landscapes

Performance Measure: Percent of baseline acres infested with invasive plants that are controlled

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
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Water and Energy Management and Development	\$59,000	\$59,000
Land Management and Development	219,000	50,000
Fish and Wildlife Management and Development	17,000	32,000
Facility Operations	7,986,000	8,196,000
Facility Maintenance and Rehabilitation	3,743,000	4,378,000
Enacted/Request	\$12,024,000	\$12,715,000
Non-Federal	10,251,000	80,000
Prior Year Funds	0	0
Total Program	\$22,275,000	\$12,795,000
Prior Year Funds/Non-Federal	(10,251,000)	(80,000)
Total Reclamation Allotment	\$12,024,000	\$12,715,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide assistance to irrigation districts with water conservation planning and implementation of conservation plans, conservation information and education programming, and demonstration of innovative conservation technologies. \$79,000

Non-Federal Participation - Southeastern Colorado Water Conservancy District and State Agencies (20

(20,000)

Subtotal, Water and Energy Management and Development

\$59,000

Land Management and Development - Continues renovation and replacement of recreation facilities to provide facilities that comply with health, safety, and accessibility standards. Decrease is due to increase in facility operations to meet project needs. 100,000

Non-Federal Participation - Colorado Division of Parks and Outdoor Recreation

(50,000)

Subtotal, Land Management and Development

50,000

Fish and Wildlife Management and Development – Includes coordination of activities associated with conservation, enhancement, and development and restoration of fish and wildlife populations and their habitats. Increase is due to additional coordination meetings with the State of Colorado. **32,000**

Facility Operations - Continues operation and management of infrastructure required for delivery of project benefits including hydroelectric power, water supply, and flood control. Includes operations to benefit endangered species while continuing to deliver other project benefits. Continues water scheduling

and analysis. Continues land resources management, recreation management, environmental compliance, public safety, site security, and cultural resources activities related to project operations.

8,206,000

Non-Federal Participation – State of Colorado

(10,000)

8,196,000

Facility Maintenance and Rehabilitation – Continues Contraction Joint Leak Repair at Pueblo Dam. Begins South Fork, Chapman and Boustead Tunnels Cleaning and the addition of Weep Holes to facilitate movement of water and avoid failure. Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures, and for inspection of bridges to ensure public safety and compliance with Federal/State code requirements. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions, and extraordinary maintenance. Increase is due to award of construction contract for Contraction Joint Leak Repair at Pueblo Dam.

4,378,000

Reclamation Request

\$12,715,000

Fryingpan-Arkansas Project Arkansas Valley Conduit

LOCATION: The Arkansas Valley Conduit (Conduit) is a proposed feature of the Fryingpan-Arkansas Project that would transport water from Pueblo Dam east to cities along the Arkansas River, extending approximately 227 miles of pipe to near Lamar, Colorado.

DESCRIPTION/JUSTIFICATION: The Conduit would serve an estimated 2070 population of 74,000, with an estimated construction cost of the preferred alternative at \$400 million (2011 dollars). In August 2013, a Final Environmental Impact Statement was completed with the Record of Decision (ROD) signed in February 2014. The ROD selected the Comanche North alternative as the preferred alternative and includes a recommendation for a long-term excess capacity master contract for storage of water in Pueblo Reservoir, and an interconnection between Pueblo Dam's north and south outlet works. The ROD recognizes the constrained Federal budget environment in relation to the cost of constructing the Conduit. Reclamation has found the Conduit to be economically feasible, but beneficiaries lacked the financial capability to finance 100 percent of project costs, as was originally authorized. The Safe Drinking Water Act standards have become more stringent over time, and communities have found it difficult to fund the increasing cost for water treatment systems. P.L. 111-11, enacted in 2009, authorizes a revised financing plan for the Conduit: 100 percent of the construction costs would be paid from Federal appropriations and 35 percent would be repaid from non-Federal sources over a period of 50 years. The repayment by non-Federal sources would include interest at a rate of 3.046 percent.

AUTHORIZATION: P.L. 87-590, Fryingpan-Arkansas Project, August 16, 1962, as amended; P.L. 110-114, the Water Resources and Development Act of 2007, November 8, 2007; P.L. 111-11, the Omnibus Public Lands Management Act of 2009, Sec. 9115, March 30, 2009.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's

Priority Goal conservation programs.

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$500,000	\$3,000,000
Enacted/Request	\$500,000	\$3,000,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$500,000	\$3,000,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$500,000	\$3,000,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development

Continue feasibility-level design activities; perform system-wide hydraulic analysis; and prepare feasibility-level cost estimates from the Regulating Tank near Pueblo Dam to the Town of Lamar. Further refining engineering, developing plan and profile drawings, and completing additional field investigations. Design support and potential contract actions for the joint use of the Pueblo Board of Water Works Whitlock Water Treatment Plant will also be advanced. Increase will allow feasibility-level design activities to continue.

Reclamation Request

\$3,000,000

Huntley Project

LOCATION: This project is located in Yellowstone County in south-central Montana.

DESCRIPTION/JUSTIFICATION: The project consists of Anita Dam and Reservoir, Yellowstone River Diversion Dam, 54 miles of canal, 202 miles of laterals, 186 miles of drains, a hydraulic turbine-driven pumping plant and an auxiliary electric pumping plant. The project diverts water from the Yellowstone River to irrigate lands on the south side of the river between Huntley and Pompeys Pillar, Montana

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 (authorized by the Secretary of the Interior on April 18, 1905).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend Water Supplies through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$7,000	\$7,000
Fish and Wildlife Management and Development	5,000	5,000
Facility Operations	45,000	45,000
Facility Maintenance and Rehabilitation	0	6,000
Enacted/Request	\$57,000	\$63,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$57,000	\$63,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$57,000	\$63,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide project-wide support of effective water conservation measures with Reclamation water districts. Also provides for water rights adjudication and water quality monitoring. \$7,000

Fish and Wildlife Management and Development - Continues oversight of monitoring fish and wildlife habitat and resources with emphasis on native, threatened and endangered species recovery and restoration.

5,000

Facility Operations - Continues operation of Yellowstone River Diversion Dam and Anita Dam for delivery of project benefits including public safety, instrumentation, and Standing Operating Procedures. Continues land resource management activities associated with facility operations, such as cultural resources and hazardous waste management.

45,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structure. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions, and extraordinary requirements.

6,000

Reclamation Request \$63,000

Kendrick Project

LOCATION: This project is located in Carbon and Natrona Counties in central Wyoming.

DESCRIPTION/JUSTIFICATION: The Kendrick Project provides waters from the North Platte River for irrigation and electrical power generation. Major features of the project are: Seminoe Dam, Reservoir, and Powerplant, with a total capacity of 1,017,280 acre-feet, a powerplant containing three units, each composed of a 15-megawatt generator; Alcova Dam, Reservoir, and Powerplant, with a total capacity of 184,300 acre-feet and a powerplant consisting of two units, each a 20.7-megawatt generator; Casper Canal and Distribution System, consisting of the 59-mile-long Casper Canal, 190 miles of laterals and sublaterals, and 42 miles of drains. Approximately 24,000 acres of irrigable project lands lie in an irregular pattern on the northwest side of the North Platte River between Alcova and Casper, Wyoming. Operation and maintenance of the Distribution System has been transferred to the Irrigation District. Some features of the North Platte Project and the Kortes Unit of the Pick-Sloan Missouri Basin Program are interspersed along the North Platte River with features of the Kendrick Project. These features operate together in the control of the river waters. Reclamation administers 59,000 acres of the Project and manages recreation on 6,000 acres which are not managed by a recreation management entity.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 (Kendrick Project was authorized by the President on August 30, 1935); and P. L. 76-260, The Reclamation Project Act of 1939, Section 9(a), August 4, 1939. (The Project, originally known as Casper-Alcova, was renamed Kendrick in 1937). Americans with Disabilities Act of 1990, July 26th, 1990, (P. L. 101-336).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$20,000	\$20,000
Land Management and Development	58,000	58,000
Fish and Wildlife Management and Development	29,000	28,000
Facility Operations	3,693,000	3,646,000
Facility Maintenance and Rehabilitation	854,000	46,000
Enacted/Request	\$4,654,000	\$3,798,000
Non-Federal	88,000	88,000
Prior Year Funds	0	0
Total Program	\$4,742,000	\$3,886,000
Prior Year Funds/Non-Federal	(88,000)	(88,000)
Total Reclamation Allotment	\$4,654,000	\$3,798,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues water conservation field services and negotiation and administration of water marketing activities, including administration of contracts with one irrigation district and two entities. \$30,000

Non-Federal – Casper Alcova Irrigation (10,000)

Subtotal, Water and Energy Management Development

\$20,000

Land Management and Development - Continues construction to provide facilities that comply with health, safety, and accessibility standards at recreation sites at Alcova and Seminoe Reservoirs.

116,000

Non-Federal - State of Wyoming and Natrona County

(58,000)

Subtotal, Land Management and Development

58,000

Fish and Wildlife Management & Development –. Continues draft NEPA document information, draft ESA Biological Assessment information, and to obtain draft Fish and Wildlife Coordination Act Report on review of existing Platte River Projects (both North and South Platte River) to ensure that Reclamation operations are not likely to jeopardize the continued existence of threatened and endangered species or to adversely modify or destroy critical habitat as required by the Endangered Species Act. 28,000

Facility Operations - Continues operation of Seminoe Dam, Reservoir and Powerplant, and Alcova Dam, Reservoir, and Powerplant. Continues operation to provide water service to the Casper Canal and Distribution System. Continues land resource management activities related to facility operations, including cultural resource management and surveys; hazardous waste management; land resource management activities related to Seminoe, Alcova, and Reclamation lands in the Casper-Alcova Irrigation

District. Continues preparation of emergency action plans; and recreation fish and wildlife operation of lands and management agreements with Wyoming State Parks and Historic Sites, Natrona County, Wyoming Game and Fish, and Bureau of Land Management.

3,666,000

Non-Federal - Casper-Alcova Irrigation District

(20,000)

Subtotal, Facility Operations

3,646,000

Kendrick Project

Facility Maintenance and Rehabilitation Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures and for bridge and landslide inspection activities to ensure public safety and compliance with Federal/State Code requirements. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions, and extraordinary maintenance requirements. Decrease reflects the completion of the stilling basin and concrete repair at Seminoe Dam.

Subtotal, Facility Maintenance and Rehabilitation

<u>46,000</u>

Reclamation Request

\$3,798,000

Leadville/Arkansas River Recovery Project

LOCATION: The project is located in Lake County in Central Colorado.

DESCRIPTION/JUSTIFICATION: The principal project feature is the Leadville Mine Drainage Tunnel Treatment Plant. Water flowing from the Leadville Mine Drainage Tunnel (LMDT) is treated to ensure proper water quality is maintained prior to discharge into the East Fork of the Arkansas River.

The authorizing legislation allows Reclamation, in cooperation with others, to proceed with investigations of water pollution sources and impacts attributed to mining and other development in the Upper Arkansas River Basin, and to develop corrective action plans to implement fish and wildlife restoration programs and water quality corrective action demonstration projects.

AUTHORIZATION: P.L. 94-423, Reclamation Authorization Act of 1976, Title VI, September 28, 1976, and P.L. 102-575, Reclamation Projects Authorization and Adjustment Act of 1992, Title VII, October 30, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Facility Operations	\$1,958,000	\$1,914,000
Enacted/Request	\$1,958,000	\$1,914,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$1,958,000	\$1,914,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$1,958,000	\$1,914,000

WORK PROPOSED FOR FY 2017:

Facility Operations - Continues operation of the LMDT Treatment Plant. Continues to provide for resources management, cultural resources, and hazardous waste compliance related to facility operations. A portion of the upper end of the LMDT lies beneath Operable Unit 6 (OU6) of the California Gulch Superfund Site. The Environmental Protection Agency (EPA) is in the process of determining a methodology to manage the overall groundwater issue for the entire site. As an interim solution, EPA installed a well and a pipeline into the LMDT treatment plant in June 2008. As a cooperative measure, Reclamation is treating the additional water from the new well and has assumed associated operation and maintenance costs.

Reclamation Request \$1,914,000

Lewis and Clark Rural Water System

LOCATION: The Lewis and Clark Rural Water System extends throughout five counties in southeast South Dakota, two counties of southwest Minnesota, and four counties of northwest Iowa.

DESCRIPTION/JUSTIFICATION: The project is designed to address concerns regarding the low quality, contamination vulnerability, and unsatisfactory supply of existing drinking water sources throughout the project area. Twenty existing water utilities have signed letters of commitment to Lewis and Clark Rural Water System, Inc., which would eventually serve over 300,000 people in the project area. The water source for the Lewis and Clark Rural Water System is the sand and gravel aquifers of the Missouri River near Vermillion, South Dakota. The raw water will be collected, treated, and distributed through a network of wells, pipelines, pump stations and storage reservoirs to bulk service connections with each of the 15 municipalities (including the City of Sioux Falls) and five rural water systems. The Federal cost- share, in the form of a grant, is 80 percent of the total project construction budget (with the exception of the Federal share for the City of Sioux Falls, which is 50 percent of the incremental costs to the City for participation in the project).

AUTHORIZATION: Division B, Title IV of P.L. 106-246, FY 2000 Supplemental Appropriations, July 13, 2000.

COMPLETION DATA: As of September 30, 2015, the project was approximately 78 percent complete. The Federal Government has committed 56 percent of its cost-share towards completing the project; the non-Federal sponsor has committed 100 percent.

Construction activities began in 2004. Early funds were used for preconstruction activities, including National Environmental Policy Act and National Historic Preservation Act compliance, Value Engineering studies, field data collection, and preparation of plans and specifications. More recently, the following facilities have been completed and placed in service: 136.8 miles of raw and treated water pipelines, 11 wells, 11 meter buildings, 3 reservoirs, 1 pump station, and a 36 million gallons per day (MGD) water treatment plant. The completed facilities are delivering water to the first 12 of 20 members, serving more than 190,000 individuals in Iowa and South Dakota. In addition, a small amount of 30-inch pipeline has been installed in Minnesota.

Across the country, State, local and Tribal governments are taking a greater leadership role in water resources investments, including financing projects. Constrained Federal budgets do not preclude non-Federal parties from moving forward with important investments in water resources infrastructure and the Department stands ready to support those efforts.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's

Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$2,774,000	\$2,775,000
Enacted/Request	\$2,774,000	\$2,775,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$2,774,000	\$2,775,000
Prior Year Funds/Non-Federal		0
Total Reclamation Allotment	\$2,774,000	\$2,775,000

Total Cost Information*

	Total Estimated Cost	Total through 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation	\$430,129,000	\$220,700,967	\$2,774,000	\$2,775,000	\$203,879,033
Non-Federal	106,079,000	106,079,000	0	0	0
Total	\$536,208,000	\$326,779,967	\$2,774,000	\$2,775,000	\$203,879,033

^{*} Includes costs associated with the authorized appropriation ceiling.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Municipal and Industrial	\$529,535,000	\$536,208,000
Total	\$529,535,000	\$536,208,000

METHODOLOGY: The methodology of the cost allocation has not been modified from last year.

APPROPRIATION CEILING: P.L. 106-246 authorizes the appropriation of \$213,887,700. At October 2016 price levels, the indexed portion of the Federal ceiling is \$430,129,000 and has a total ceiling of \$536,208,000. This authorization is adequate to cover the project as currently proposed.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development – The FY 2017 funds will be used to construct all or a portion of the 10-mile Minnesota Segment (MN-3B) pipeline or the four million gallon Rock County Reservoir. \$2,775,000

Reclamation Request

\$2,775,000

Lower Rio Grande Water Conservation Project

LOCATION: The project is located in counties in the Rio Grande Regional Water Planning Area known in Texas as Region "M" (Hidalgo and Cameron Counties) and the counties of El Paso and Hudspeth, Texas.

DESCRIPTION/JUSTIFICATION: This program identifies opportunities to improve the water supply for selected counties along the Texas-Mexico border. The area involved has been impacted by drought, increased demands, and limited water supply from the Rio Grande. P.L. 106-576 authorized Reclamation to provide cost-share funding for engineering work and preparation or review of reports and for construction of four selected projects. P.L. 107-351 authorized construction of 15 additional projects. All of the projects are identified in the State's Water Plan. Reclamation is authorized to provide a maximum of up to 50 percent cost share for construction of all of the projects. Once construction has been completed, the projects remain under the ownership and control of the non-federal partners.

AUTHORIZATION:

P.L. 106-576, Lower Rio Grande Valley Water Resources Conservation and Improvement Act of 2000, December 28, 2000, as amended; P.L.107-351, Lower Rio Grande Valley Water Resources Conservation and Improvement Act of 2002, December 17, 2002.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$50,000	\$50,000
Enacted/Request	\$50,000	\$50,000
Non-Federal	2,000,000	2,000,000
Prior Year Funds	0	0
Total Program	\$2,050,000	\$2,050,000
Prior Year Funds/Non-Federal	(2,000,000)	(2,000,000)
Total Reclamation Allotment	\$50,000	\$50,000

Total Cost Information*

	Total Estimated Cost	Total through 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation .1/	\$47,000,000	\$20,519,911 3/	\$50,000	\$50,000	\$26,380,089
Non-Federal 1/2/	47,000,000	54,425,822 4/	2,000,000	2,000,000	(11,425,822) 4/
Total 5/	\$94,000,000	\$74,945,733	\$2,050,000	\$2,050,000	\$14,954,267

^{*} Includes costs associated with the authorized appropriation ceiling.

Construction Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation	\$94,000,000	\$94,000,000
Total	\$94,000,000	\$94,000,000

METHODOLOGY: All costs are assigned as non-reimbursable as per the legislation.

APPROPRIATION CEILING: P.L. 107-351 authorizes the appropriation of \$55 million. This authorization is adequate to cover the project as currently proposed.

COST-SHARING: Texas Water Development Board, the Lower Rio Grande Valley Irrigation Districts, and Lower Rio Grande Regional Water Planning Group M

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues investigations, engineering work, review of reports and studies presented to Reclamation, coordination of all necessary National Environmental Policy Act compliance requirements, and construction verification for the 19 authorized projects. \$2,050,000

Non-Federal- Texas Water Development Board, Lower Rio Grande Valley Irrigation Districts, and Lower Rio Grande Regional Water Planning Group M

(2,000,000)

Subtotal, Water and Energy Management and Development

\$50,000

Reclamation Request

\$50,000

¹/ P.L. 107-351 (12/27/02). Amends P.L. 106-576 by adding 15 additional projects to the original 4 projects authorized in the previous legislation, bringing the total authorized projects under this authority to 19 projects. Amendment also struck out \$2 million and inserted \$8 million for costs associated with report preparation, and struck out \$10 million and inserted \$47 million for total construction cost.

²/All non-Federal contributions for FY 2016 and FY 2017 are estimates only.

^{3/}Does not include oversight activities which do not apply towards the ceiling.

⁴/Project cost share is 50/50; Reclamation may reimburse non-Federal sponsors as appropriations become available. Total project costs to date are \$74,945,733 of which \$54,425,822 has been contributed from the non-Federal sponsors and \$20,519,911 has been contributed from Reclamation. The total balance to complete of \$14,954,267 includes the non-Federal credit of \$11,425,822 to meet the 50/50 cost share. However, the funds needed to complete Reclamation's share of the project are \$26,380,089.

^{5/} Total Federal authorized appropriations shall not exceed \$55,000,000. Federal construction costs shall not exceed \$47,000,000. Total project costs are 50/50.

Lower Yellowstone Project

LOCATION: This Project is located in Richland and Dawson Counties in east-central Montana and McKenzie County in western North Dakota. About one-third of the project lands are in North Dakota and two-thirds in Montana.

DESCRIPTION/JUSTIFICATION: The project consists of the Lower Yellowstone Intake Diversion Dam, Thomas Point Pumping Plant and 4 small pumps on the Yellowstone River, 71 miles of Main Canal, 225 miles of laterals, and 118 miles of drains. The purpose of the project is to furnish a dependable supply of irrigation water for 52,133 acres of land along the Yellowstone River. More recently Reclamation has been working with the Corps to provide improved fish passage and entrainment protection at Intake. All project facilities are operated and maintained by water users.

The Water Resources Development Act of 2007 authorized the U.S. Army Corps of Engineers (Corps) to use Missouri River Recovery Program funds to assist Reclamation in the design and construction of the fish passage and fish screen for the purpose of ecosystem restoration. The Corps completed construction of the intake structure and screens in FY 2012.

Reclamation will continue oversight and coordination with the Corps to complete planning and associated environmental compliance to address endangered pallid sturgeon passage at the Intake Diversion Dam. Monitoring of pallid sturgeon for project effects and Section 7 Endangered Species Act (ESA) compliance will continue.

Recent legal actions by third parties have challenged and enjoined the Corps' and Reclamation's 2015 decision to implement a fish bypass and diversion dam modification project. This has created a need to provide both administrative and technical support activities for the near term.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 (authorized by the Secretary of the Interior on May 10, 1904).

PERFORMANCE INFORMATION: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Fish and Wildlife Management and Development	\$364,000	\$364,000
Facility Operations	16,000	16,000
Enacted/Request	\$380,000	\$380,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$380,000	\$380,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$380,000	\$380,000

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development – Continues review and preparation of environmental compliance documents and checklists for proposed minor actions. Continues oversight and coordination with the Corps to complete planning and associated environmental compliance to address endangered pallid sturgeon passage at the Intake Diversion Dam. Continues monitoring of pallid sturgeon for project effects and Section 7 Endangered Species Act (ESA) compliance which involves any necessary new consultation and resulting implementation on project operations, maintenance, and implementation of a Corps funded passage project. Continues administrative and technical support activities related to litigation which challenged and enjoined the Corps' and Reclamation's 2015 decision to implement a fish bypass and diversion dam modification project.

Facility Operations - Continues oversight tasks associated with operations for actions including grants, title transfer, withdrawn and acquired land reviews and disposal, development of Geographic Information System data/layers, and issuance of permits for environmental and cultural resource compliance activities. Continues post-construction monitoring of intake structure and screen diversion rates. **16,000**

Reclamation Request \$380,000

McGee Creek Project

LOCATION: This project is located in Atoka County in southeastern Oklahoma.

DESCRIPTION/JUSTIFICATION: The project consists of McGee Creek Dam and Reservoir, public recreation facilities, a wildlife management area, and a natural scenic recreation area. The project provides a municipal and industrial water supply of 71,800 acre-feet annually for Oklahoma City and surrounding communities, and 165,000 acre-feet of storage for flood control, recreation, and fish and wildlife. The McGee Creek Authority, the Oklahoma Tourism and Recreation Department, and the Oklahoma Department of Wildlife Conservation manage this project.

AUTHORIZATION: P.L. 94-423, Reclamation Authorizations Act of 1976, Section 701-707, September 28, 1976.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$26,000	\$26,000
Land Management and Development	0	99,000
Fish and Wildlife Management and Development	65,000	64,000
Facility Operations	808,000	791,000
Facility Maintenance and Rehabilitation	43,000	4,000
Enacted/Request	\$942,000	\$984,000
Non-Federal	34,000	84,000
Prior Year Funds	0	0
Total Program	\$976,000	\$1,068,000
Prior Year Funds/Non-Federal	(34,000)	(84,000)
Total Reclamation Allotment	\$942,000	\$984,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide support to project partners and beneficiaries for the coordination, management, and implementation of water conservation plans and water resources management strategies. Continues the administration of Reclamation water contracts and reviews for contract compliance.

\$35,000

Non-Federal - McGee Creek Authority

(9,000)

Subtotal - Water and Energy Management and Development

\$26,000

Land Management and Development – Funding will be used to improve recreation facilities and to comply with health, safety, and accessibility requirements at the project. Increase in funding will be used to match State funds under the Authority of Title 28 to improve universal accessibility of facilities and enhance recreation experiences at the project.

174,000

Non-Federal – Oklahoma Department of Tourism and Recreation

(75,000)

1

Subtotal, Land Management and Development

99,000

Fish and Wildlife Management and Development - Continues conservation measures and new annual survey requirements for the endangered American Burying Beetle. **64,000**

Facility Operations - Continues reimbursement to the operating entity, the McGee Creek Authority, for joint operations costs allocated to flood control. Continues reimbursement to the Oklahoma Department of Wildlife Conservation and Oklahoma Tourism and Recreation Department for the operating costs of the wildlife management area and Natural Scenic Recreation Area, respectively. Funding continues emergency management planning, reviewing and updating the project Standing Operating Procedures, dam operator training, and emergency exercise program activities. Continues ongoing resource management activities related to facility operation, including management of the wildlife area, recreation planning and development, public safety and universal accessibility compliance, National Environmental Policy Act compliance, and administering land management and hazardous waste programs.

791,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. Decrease is due to Dive Exam not being required in 2017. **4,000**

Reclamation Request \$984,000

Mid-Dakota Rural Water Project

LOCATION: The Mid-Dakota Rural Water System Project (Project) area includes all, or portions of, the counties of Aurora, Beadle, Buffalo, Faulk, Hand, Hughes, Hyde, Jerauld, Kingsbury, Potter, Sanborn, Spink, and Sully in South Dakota. The project area covers approximately 7,000 square miles of the State of South Dakota (roughly 10 percent of the total land area of the state). The Project area extends approximately 125 miles from its western boundary along the Missouri River to its eastern boundary of the Beadle County and Kingsbury County division line. The system extends from its northern-most boundary of Potter County, a distance of approximately 80 miles, to its southern-most boundary of Sanborn County.

Mid-Dakota is responsible for raw water delivery to the Hyde Waterfowl Production Area (WPA). The Hyde WPA is located in western Hughes County one mile south of the Mid-Dakota Water Treatment Plant.

DESCRIPTION/JUSTIFICATION: The Mid-Dakota Rural Water System utilizes water pumped from an intake located on Oahe Reservoir. The Project brings a dependable supply of good quality drinking water to 31,000 people and thousands of head of livestock. A wetland component that included construction of some delivery features was incorporated into the original Project by means of a nonreimbursable grant. The operation and maintenance of the wetland component; i.e., pumping and labor costs, are being funded 100 percent by Federal funds.

AUTHORIZATION: P.L. 102-575, Title XIX, Mid-Dakota Rural Water System, October 30, 1992.

COMPLETION DATA: Construction of the Project was completed in FY 2006. Annual appropriations are to be made by the Secretary to the Mid-Dakota Rural Water System, Inc., for the operation and maintenance of the wetland component.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Facility Operations	\$15,000	\$15,000
Enacted/Request	\$15,000	\$15,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$15,000	\$15,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$15,000	\$15,000

WORK PROPOSED FOR FY 2017:

Facility Operations - Continues to fund operation and maintenance of the pipeline, including the energy and labor costs required to deliver raw water to the Hyde WPA. \$15,000

Reclamation Request \$15,000

Milk River Project

LOCATION: This project is located in Blaine, Glacier, Hill, Phillips, and Valley counties in northcentral Montana.

DESCRIPTION/JUSTIFICATION: The project consists of Lake Sherburne, Nelson and Fresno Storage Dams, Dodson, Vandalia, St. Mary, and Paradise diversion dams, Swift Current Creek Dike, Dodson Pumping Plant, and about 200 miles of canals, 220 miles of laterals, and 300 miles of drains. The irrigation service area includes 120,000 acres and extends approximately 165 miles along the Milk River from a point near Havre to a point six miles below Nashua, Montana. Reclamation operates and maintains Lake Sherburne and Fresno storage dams, St. Mary Diversion Dam, and the 28-mile-long St. Mary Canal. Water user entities operate and maintain the remainder of the dams, canals, and water distribution systems. Reclamation manages limited recreation facilities at the Fresno and Nelson reservoirs.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 (conditionally approved by the Secretary of the Interior on March 14, 1903); The St. Mary Storage Unit was authorized by the Secretary on March 25, 1905; and P.L. 73-67, The National Industrial Recovery Act (Fresno Dam), June 16, 1933, (pursuant to P.L.61-289, Advances to the Reclamation Fund, June 25, 1910, and P.L. 68-292, Second Deficiency Appropriation Act [Fact Finder's Act], December 5, 1924); and P.L.76-398, Water Conservation and Utilization Act (Dodson Pumping Unit), August 11, 1939.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$235,000	\$235,000
Fish and Wildlife Management and Development	313,000	313,000
Facility Operations	990,000	990,000
Facility Maintenance and Rehabilitation	497,000	158,000
Enacted/Request	\$2,035,000	\$1,696,000
Non-Federal	635,000	798,000
Prior Year Funds	0	0
Total Program	\$2,670,000	\$2,494,000
Prior Year Funds/Non-Federal	(635,000)	(798,000)
Total Reclamation Allotment	\$2,035,000	\$1,696,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues coordination with the Blackfeet Tribe to determine how the project can be managed and maintained in a manner that would be more compatible with tribal resource management goals and objectives. Continues water rights adjudication, water quality monitoring, issuance and administration of water service contracts, and efficiency incentives for demonstration and implementation of effective water management measures. \$285,000

Non-Federal Participation – Milk River Water Users (50,000)

Subtotal, Facility Operations

\$235,000

Fish and Wildlife Management and Development - Continues oversight tasks required by Section 7 of the Endangered Species Act for project operation effects on threatened and endangered species recovery and restoration. Also provides for oversight of planning activities in preparation for the construction of a new canal head works and diversion dam to address fish entrainment and passage for the threatened bull trout, and the development of a fish monitoring plan for the St. Mary facilities as identified in the environmental compliance commitments.

313,000

Facility Operations - Continues operation of Lake Sherburne Dam, Fresno Dam, St. Mary Diversion Dam, and St. Mary Canal, which includes reservoir operations and emergency management, instrumentation and standing operating procedures, public safety activities, and minimal operation for Fresno and Nelson recreation areas. Reclamation's share includes operating in compliance with the Boundary Waters Treaty of 1909, continuing work on standing operating procedures and as-built drawings, and nonreimbursable program activities including recreation and Fresno Dam and Reservoir flood control. Continues land resource management activities associated with facility operations, such as land acquisition, cabin lease administration, cultural resources, invasive species control management, and hazardous waste management.

1,513,000

Non-Federal Participation – 8 Irrigation Districts and 205 pump contracts

(523,000)

Subtotal, Facility Operations

990,000

Facility Maintenance and Rehabilitation – Includes funding for St Mary Storage unit drops concrete repair. Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions, and extraordinary maintenance requirements. Decrease is due to the expected completion of the Fresno Beach area road rehabilitation in FY 2016.

Non-Federal Participation - Irrigation Districts

(225,000)

Subtotal, Facility Maintenance and Rehabilitation

158,000

Reclamation Request

\$1,696,000

Mirage Flats Project

LOCATION: This project is located in Dawes and Sheridan County in northwestern Nebraska on the Niobrara River.

DESCRIPTION/JUSTIFICATION: The Mirage Flats Project facilities operated by the Mirage Flats Irrigation District include the Box Butte Dam and Reservoir, Dunlap Diversion Dam, Mirage Flats Canal, distribution system and drainage systems. The water supply for the project comes from the Niobrara River and is stored in Box Butte Reservoir. Irrigation water is released from the reservoir into the Niobrara River and 8 miles downstream it is diverted at the Dunlap Diversion Dam into the Mirage Flats Canal for distribution to the project lands. The distribution system consists of 14.4 miles of canal and four main laterals totaling approximately 47.2 miles in length. Three drains, totaling 14 miles in length, carry floodwater and farm wastewater from the project lands. The project serves 11,662 acres of irrigable lands in Sheridan County.

AUTHORIZATION: P. L. 76-68, Interior Department Appropriation Act, 1940, May 10, 1939; P.L. 76-398, Water Conservation and Utilization Act, August 11, 1939.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating.

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$13,000	\$13,000
Facility Operations	97,000	87,000
Facility Maintenance and Rehabilitation	13,000	11,000
Enacted/Request	\$123,000	\$111,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$123,000	\$111,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$123,000	\$111,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues activities at Box Butte Reservoir to provide technical assistance in the evaluation of proposed water conservation measures and demonstrates projects identified in conservation plans which promote effective water management and conservation.

\$13,000

Facility Operations - Continues administration of land management program, cultural resource program, public safety program, and hazardous waste program related to facility operations. Continues the emergency management program to notify downstream residents of potential hazards associated with unusual flooding events.

87,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safety and reliable operation of the structures, and for inspection of bridges to ensure public safety and meeting Federal/State Code requirements. The funding varies depending on the type of required annual inspections at the dam.

11,000

Reclamation Request \$111,000

Mni Wiconi Project

LOCATION: The project is located in the counties of Stanley, Haakon, Lyman, Jones, Jackson, Mellette, Pennington, Todd, Bennett, and Shannon in South Dakota.

DESCRIPTION/JUSTIFICATION: The project treats a combination of groundwater and Missouri River water from Lake Sharpe below Oahe Dam and delivers potable water via pipelines throughout the project area. The Indian Self-Determination Act (P.L. 93-638) applies to planning, design, construction, and operation. The project consists of new systems, as well as 40 existing Mni Wiconi community systems, and facilities to serve approximately 5,000 rural residences. At full-build-out, the project will serve approximately 55,000 people. Responsibilities of the Secretary under the Act include the operation and maintenance of existing water systems and appurtenant facilities on the Pine Ridge, Rosebud, and Lower Brule Indian Reservations.

AUTHORIZATION: P.L. 93-638, Indian Self Determination Act, January 4, 1975, as amended; P.L. 100-516, Mni Wiconi Act of 1988, Sections 1-12, October 24, 1988; P.L. 102-575, Reclamation Projects Authorization and Adjustment Act of 1992, Title X, October 30, 1992; P.L. 103-434, Yavapi-Prescott Indian Tribe Water Rights Settlement Act of 1994, October 31, 1994; P.L. 103-367, Reauthorizes the Mni Wiconi Rural Water Supply Project, December 19, 2002; and P.L. 110-161, Consolidated Appropriations Act, 2008.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating.

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Facility Operations	\$12,000,000	\$12,200,000
Enacted/Request	\$12,000,000	\$12,200,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$12,000,000	\$12,200,000
Prior Year Funds/Non Federal	0	0
Total Reclamation Allotment	\$12,000,000	\$12,200,000

WORK PROPOSED FOR FY 2017:

Facility Operations - Funds are provided for the operation and maintenance of the system features on the Indian reservations. \$12,200,000

Reclamation Request \$12,200,000

Mountain Park Project

LOCATION: This project is located in Kiowa County in southwestern Oklahoma.

DESCRIPTION/JUSTIFICATION: The principal features of the Mountain Park Project are Mountain Park Dam, on West Otter Creek in Kiowa County located 6 miles west of Snyder, Oklahoma, 2 pumping plants, 40 miles of aqueduct system, and other appurtenant facilities.

The Mountain Park Project provides a supplemental municipal and industrial water supply to the Oklahoma cities of Altus, Snyder, Frederick, and the Hackberry Flat Wildlife management Area. The project also provides flood control, recreation, and fish and wildlife and environmental quality benefits.

AUTHORIZATION: P.L. 90-503, Mountain Park Project, September 21, 1968; amended by P.L. 93-493, Reclamation Development Act of 1974, October 27, 1974; P.L. 102-575, Title XXXI, Mountain Park Conservancy District, Oklahoma Act, October 20, 1992; P.L. 103-434, Title IV, Mountain Park Project Act, October 31, 1994.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$25,000	\$25,000
Land Management and Development	0	59,000
Facility Operations	582,000	598,000
Facility Maintenance and Rehabilitation	5,000	4,000
Enacted/Request	\$612,000	\$686,000
Non-Federal	9,000	44,000
Prior Year Funds	0	0
Total Program	\$621,000	\$730,000
Prior Year Funds/Non-Federal	(9,000)	(44,000)
Total Reclamation Allotment	\$612,000	\$686,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide support to project partners and beneficiaries for the coordination, management, and implementation of water conservation plans and water resources management strategies. Continues the administration of Reclamation water contracts and reviews for contract compliance. \$34,000

Non-Federal - Mountain Park Master Conservancy District

(9,000)

Subtotal, Water and Energy Management and Development

\$25,000

Land Management and Development – Utilizes the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards. Increase is due to needs of project and managing partners to meet standards noted above.

94,000 (35,000)

Non-Federal – Oklahoma Department of Tourism and Recreations

Subtotal, Land Management and Development

59,000

Facility Operations - Continues reimbursement to the operating entity, Mountain Park Master Conservancy District, for joint operations costs allocated to recreation, fish and wildlife, flood control, and environmental quality. Continues emergency management planning, reviewing and updating the project Standing Operating Procedures, dam operator training, and emergency exercise program activities. Continues ongoing resource management activities related to facility operation, including recreation planning and development, public safety and universal accessibility compliance. National Environmental Policy Act compliance and administering land management and hazardous waste programs.

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures.

4,000

Reclamation Request \$686,000

Norman Project

LOCATION: This project is located in Cleveland and Oklahoma Counties in central Oklahoma.

DESCRIPTION/JUSTIFICATION: The principal features of the project are Norman Dam on Little River located about 13 miles east of Norman, two pumping plants, and two pipelines which serve the communities in the project. The Central Oklahoma Master Conservancy District and the Oklahoma Tourism and Recreation Department manage this project.

The Norman Project provides a supplemental municipal water supply for the cities of Norman, Del City, and Midwest City, Oklahoma, flood protection to lands south and east of the project area, and significant recreation benefits.

AUTHORIZATION: P.L. 86-529, Norman Project, June 27, 1960.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating.

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and		
Development	\$17,000	\$17,000
Land Management and Development	31,000	54,000
Facility Operations	291,000	287,000
Facility Maintenance and Rehabilitation	12,000	11,000
Enacted/Request	\$351,000	\$369,000
Non-Federal	30,000	30,000
Prior Year Funds	0	0
Total Program	\$381,000	\$399,000
Prior Year Funds/Non-Federal	(30,000)	(30,000)
Total Reclamation Allotment	\$351,000	\$369,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide support to project partners and beneficiaries for the coordination, management, and implementation of water conservation plans and water resources management strategies. Continues the administration of Reclamation water contracts and reviews for contract compliance. \$17,000

Land Management and Development –Funds will be used to improve recreation facilities and to comply with health, safety, and accessibility requirements at the project. \$84,000 Non-Federal – Oklahoma Tourism and Recreation Department (30,000)

Subtotal, Land Management and Development

54,000

Facility Operations - Continues reimbursement to the operating entity, the Central Oklahoma Master Conservancy District, for actual costs incurred by the District to repair the Del City Pipeline. Continues emergency management planning, reviewing and updating the project Standing Operating Procedures, dam operator training, and emergency exercise program activities. Continues ongoing resource management activities related to facility operation, including recreation planning and development, National Environmental Policy Act compliance, public safety and universal accessibility compliance, and administering land management and hazardous waste programs.

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures.

<u>11,000</u>

Reclamation Request \$369,000

North Platte Project

LOCATION: This project is located in Morrill, Sioux, and Scotts Bluff Counties in western Nebraska, and in Carbon, Goshen, Natrona, and Platte Counties in southeastern Wyoming.

DESCRIPTION/JUSTIFICATION: The North Platte Project service area extends 111 miles along the North Platte River Valley from near Guernsey, Wyoming, to below Bridgeport, Nebraska. The project provides a full water supply for irrigation of approximately 226,000 acres that are divided into four irrigation districts. A supplemental supply is furnished to nine user associations serving a combined area of about 109,000 acres. Electric power is supplied to the project area.

Project features are the Pathfinder Dam and Reservoir, Guernsey Dam, Reservoir, and Powerplant. The water users operate and maintain Whalen Diversion Dam, Lake Alice, Lake Minatare, and two other regulating reservoirs; and over 2,000 miles of canals, laterals, and four drain diversion dams. The regulating reservoirs are a portion of the North Platte National Wildlife Refuge.

Pathfinder Dam and Reservoir are located on the North Platte River about 47 miles southwest of Casper, Wyoming. It has a current storage capacity of 1,016,000 acre-feet (af), holds much of the North Platte Project water, and is a National Historic Site. Portions of Pathfinder Reservoir, Minatare, Winters Creek, and Lake Alice are also included in National Wildlife Refuges.

Reclamation manages the land and recreation on Pathfinder and Guernsey Reservoirs, Whalen Diversion Dam, Lake Alice, Winter Creek, and Lake Minatare.

Guernsey Dam, Reservoir, and Powerplant are located two miles upstream of Guernsey, Wyoming, with a current storage capacity of 45,612 af. This is a National Historic District. Water released from Pathfinder Reservoir is stored and released to fit varying downstream irrigation demands.

Whalen Diversion Dam is located eight miles below Guernsey Dam and diverts water to the Fort Laramie and Interstate Canals. The Fort Laramie Canal has an initial capacity of 1,500 cubic feet per second and winds its way for 130 miles to an area south of Gering, Nebraska. The Interstate Canal and Reservoir System has an initial capacity of 2,200 cubic feet per second and winds its way for 95 miles to Lake Alice and Lake Minatare northeast of Scottsbluff, Nebraska. From Lake Alice the High-Line Canal extends for 37 miles, and from Lake Minatare the Low-Line Canal extends for 44 miles. The Northport Canal is 28 miles long and has a diversion capacity of 250 cubic feet per second. The Project includes 54,000 acres of Reclamation lands which are managed by Reclamation and management agencies for recreation and land uses.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 (Sweetwater Project, authorized by the Secretary of the Interior on March 14, 1903); Guernsey Dam and Powerplant, approved by the President, April 30, 1925; and Americans with Disabilities Act of 1990, July 26th, 1990, (P. L. 101-336)

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$152,000	\$152,000
Land Management and Development	10,000	10,000
Fish and Wildlife Management and Development	43,000	43,000
Facility Operations	1,096,000	1,087,000
Facility Maintenance and Rehabilitation	94,000	66,000
Enacted/Request	\$1,395,000	\$1,358,000
Non-Federal	454,000	442,000
Prior Year Funds	0	0
Total Program	\$1,849,000	\$1,800,000
Prior Year Funds/Non-Federal	(454,000)	(442,000)
Total Reclamation Allotment	\$1,395,000	\$1,358,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues negotiation and administration of water marketing activities which provides for administration of contracts with 13 irrigation districts. Continues water conservation field services for demonstration and implementation of effective water management measures. \$252,000

Non-Federal – Pathfinder and Gering-Ft Laramie Irrigation Districts (100,000)

Subtotal, Water and Energy Management and Development

\$152,000

Land Management and Development - Continues construction of recreation facilities to provide facilities that comply with health, safety, and accessibility standards at Guernsey Reservoir.

20,000

Non-Federal - State of Wyoming

(10,000)

Subtotal, Land Management and Development

10,000

Fish and Wildlife Management and Development - Continues draft National Environmental Policy Act document information, draft Endangered Species Act (ESA) Biological Assessment information and draft Fish and Wildlife Coordination Act Report on review of existing Platte River Projects (both North and South Platte River) to ensure that Reclamation operations are not likely to jeopardize the continued existence of threatened and endangered species or to adversely modify or destroy critical habitat as required by the ESA.

43,000

Facility Operations - Continues operation of Pathfinder Dam, Guernsey Dam and Powerplant, the carriage and drainage system, and hydrologic monitoring reporting and preparation of emergency action plans. Land resource management activities related to facility operations will continue, including cultural resource management and historical resources associated with Pathfinder National Historic Site, Guernsey National Historic Landmark and District; hazardous materials and waste management related to reservoirs and easement lands; and recreation fish and wildlife management agreements with Wyoming State Parks and Historic Sites, US Fish and Wildlife Service Refuges, and Nebraska Game and Parks.

1,419,000

Non-Federal - Farmer's Irrigation District, Pathfinder Irrigation District, and others

(332,000)

Subtotal, Facility Operations

1,087,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions, and extraordinary maintenance requirements. Decrease due to a special inspection in FY 2016 at Pathfinder Dam not required in FY 2017.

Subtotal, Facility Maintenance and Rehabilitation

<u>66,000</u>

Reclamation Request

\$1,358,000

Nueces River Project

LOCATION: This project is located in the Counties of Live Oak and McMullen in south-central Texas.

DESCRIPTION/JUSTIFICATION: Choke Canyon Dam and Reservoir are the principal features of the project and are operated in conjunction with Lake Corpus Christi. The Texas Parks and Wildlife Department manages the recreations facilities at the reservoir. The City of Corpus Christi provides operation and maintenance responsibilities for the dam and reservoir and makes all deliveries from the system for authorized purposes.

The Nueces River Project was authorized to develop a dependable water supply for municipal and industrial use by the City of Corpus Christi and other populated areas of the Coastal Bend. In addition, the multipurpose project also provides for fish and wildlife conservation and outdoor recreational opportunities.

AUTHORIZATION: P.L. 93-493, Reclamation Development Act of 1974, Title X, October 27, 1974.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's

Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$38,000	\$38,000
Land Management and Development	39,000	59,000
Fish and Wildlife Management and Development	11,000	11,000
Facility Operations	819,000	704,000
Facility Maintenance and Rehabilitation	5,000	4,000
Enacted/Request	\$912,000	\$816,000
Non-Federal	68,000	35,000
Prior Year Funds	0	0
Total Program	\$980,000	\$851,000
Prior Year Funds/Non-Federal	(68,000)	(35,000)
Total Reclamation Allotment	\$912,000	\$816,000

Water and Energy Management and Development - Continues to provide support to project partners and beneficiaries for the coordination, management, and implementation of water conservation plans and water resources management strategies. Continues the administration of Reclamation water contracts and reviews for contract compliance. \$38,000

Land Management and Development - Funds will be used to improve recreation facilities and to comply with health, safety, and accessibility requirements at the project. \$94,000 Non Federal – Texas Parks and Wildlife (35,000)

Subtotal, Land Management and Development

59,000

Fish and Wildlife Management and Development - Continues conservation measures and investigations associated with the Ocelot and Jaguarundi near Choke Canyon Reservoir.

11,000

Facility Operations - Continues reimbursement to the operating entities, the City of Corpus Christi, and Nueces River Authority, for joint operations costs allocated to recreation and fish and wildlife. Continues emergency management planning, reviewing and updating the project Standing Operating Procedures, dam operator training, and emergency exercise program activities. Continues resource management activities related to facility operations, including recreation planning and development, public safety and universal accessibility compliance, National Environmental Policy Act compliance, and administering land management and hazardous waste programs. Continues cultural resources site protection activities for resources associated with Choke Canyon Dam and Reservoir.

704,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. **4,000**

Reclamation Request \$816,000

Ainsworth Unit Pick-Sloan Missouri Basin Program

LOCATION: The Ainsworth Unit is located in north central Nebraska, in Brown, Cherry, and Rock Counties.

DESCRIPTION/JUSTIFICATION: The Ainsworth Unit consists of the Merritt Dam and Reservoir, Ainsworth Canal, a system of laterals and surface and subsurface drains. The water supply for the unit comes from the Snake River and is stored in Merritt Reservoir. The concrete lined Ainsworth Canal, 52.9 miles long, conveys the water to the project lands located about 30 miles east of the reservoir.

AUTHORIZATION: The Ainsworth Unit was authorized as an integral part of the Missouri River Basin Project by P.L. 83-612, Ainsworth Lavaca Flats, Mirage Flats Extension, and O'Neill Units, Missouri River Basin Project, August 21, 1954.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$39,000	\$39,000
Land Management and Development	25,000	25,000
Fish and Wildlife Management and Development	0	6,000
Facility Operations	102,000	92,000
Facility Maintenance and Rehabilitation	13,000	11,000
Enacted/Request	\$179,000	\$173,000
Non-Federal	40,000	40,000
Prior Year Funds	0	0
Total Program	\$219,000	\$213,000
Prior Year Funds/Non-Federal	(40,000)	(40,000)
Total Reclamation Allotment	\$179,000	\$173,000

Water and Energy Management and Development - Continues to provide technical assistance in the evaluation of proposed water conservation measures and demonstrates projects identified in conservation plans which promote effective water management and conservation. Provides for the administration and compliance of repayment contracts with Ainsworth Irrigation District. \$54.000

Non-Federal Participation – Nebraska Game and Parks,

Kansas Department of Wildlife and Colorado Parks and Wildlife (15,000)

Subtotal, Water and Energy Management and Development

\$39,000

Land Management and Development – Utilizes the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards.

50,000

Non-Federal Participation – Nebraska Game and Parks,

Kansas Department of Wildlife and Colorado Parks and Wildlife

(25,000)

Subtotal, Land Management and Development

25,000

Fish and Wildlife Management and Development – Provides for coordination of activities associated with conservation, enhancement, development and restoration of fish and wildlife populations and their habitats. **6,000**

Facility Operations – Continues administration of land management program, cultural resource program, public safety program, and hazardous waste program related to facility operations. Continues the emergency management program to notify downstream residents of potential hazards associated with unusual flooding events.

92,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures, and for inspection of bridges to ensure public safety and meeting Federal/State Code requirements. The funding varies depending on the type of required annual inspections at the dam.

11,000

Reclamation Request \$173,000

Almena Unit Pick-Sloan Missouri Basin Program

LOCATION: The Almena Unit is located in Norton and Phillips Counties of north central Kansas.

DESCRIPTION/JUSTIFICATION: The Almena Unit is located along the valley of Prairie Dog Creek and consists of Norton Dam and Reservoir, Almena Diversion Dam, Almena Main and South Canals, and a system of laterals and drains to serve 5,764 acres of project lands. The Division provides water for use in the City of Norton; protects the valley downstream from floods; and offers opportunities for recreation and for conservation and development of fish and wildlife resources.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; and P.L 79-526, The Flood Control Act of 1946, July 24, 1946.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$15,000	\$15,000
Land Management and Development	25,000	25,000
Fish and Wildlife Management and Development	0	3,000
Facility Operations	486,000	467,000
Facility Maintenance and Rehabilitation	10,000	4,000
Enacted/Request	\$536,000	\$514,000
Non-Federal	25,000	25,000
Prior Year Funds	0	0
Total Program	\$561,000	\$539,000
Prior Year Funds/Non-Federal	(25,000)	(25,000)
Total Reclamation Allotment	\$536,000	\$514,000

Water and Energy Management and Development - Continues to provide technical assistance in the evaluation of proposed conservation measures and demonstration projects identified in conservation plans which promote effective water management and conservation. Provides for the administration and compliance of contracts with the Almena Irrigation District and the City of Norton. \$15,000

Land Management and Development – Utilizes the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards.

\$50,000

Non-Federal Participation – Nebraska Game and Parks, Kansas Department of Wildlife and Colorado Parks and Wildlife

(25,000)

Subtotal, Land Management and Development

25,000

Fish and Wildlife Management and Development – Provides for coordination of activities associated with conservation, enhancement, development and restoration of fish and wildlife populations and their habitats. **3,000**

Facility Operations - Continues day-to-day operations of Norton Dam for continued delivery of project benefits, including flood control, and delivery of project water to users. Continues program activities Related to project operations, such as land management, hazardous waste, and recreation management. Continues coordination of the emergency management program and updates the Standing Operating Procedures at Norton Dam.

467,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. **4,000**

Reclamation Request \$514,000

Angostura Unit Pick-Sloan Missouri Basin Program

LOCATION: The Angostura Unit is located in Custer and Fall River Counties of southwestern South Dakota.

DESCRIPTION/JUSTIFICATION: The primary feature of the Angostura Unit (Unit) is Angostura Dam and Reservoir, located on the Cheyenne River about nine miles southeast of the City of Hot Springs. The 12,218 acres of the Unit's lands are served by 30 miles of canals, 39 miles of laterals, and 34 miles of drains. The Unit provides multipurpose benefits, including irrigation, flood control, fish and wildlife conservation, and recreation.

AUTHORIZATION: P.L. 398, Water Conservation and Utilization Act, August 11, 1939; reauthorized by P.L. 78-534; and The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Celebrating and Enhancing America's Great Outdoors; Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Protect America's Landscape

Performance Measure: Percent of baseline acres infested with invasive plant species that are controlled

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$71,000	\$71,000
Land Management and Development	178,000	178,000
Facility Operations	740,000	715,000
Facility Maintenance and Rehabilitation /	10,000	4,000
Enacted/Request	\$999,000	\$968,000
Non-Federal	220,000	220,000
Prior Year Funds	0	0
Total Program	\$1,219,000	\$1,188,000
Prior Year Funds/Non-Federal	(220,000)	(220,000)
Total Reclamation Allotment	\$999,000	\$968,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide project-wide support for the planning and implementation of effective water conservation measures with the Angostura Irrigation District. \$113,000

Non-Federal Participation - Angostura Irrigation District (42,000)

Subtotal, Water and Energy Management and Development

\$71,000

Land Management and Development - Continues the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards.

356,000

Non-Federal Participation - South Dakota Game Fish and Parks (178,000)

Subtotal, Land Management and Development

178,000

Facility Operations - Continues Reclamation's payments to the operating entity, Angostura Irrigation District, for operation of Angostura Dam for continued delivery of project benefits, including future capacity flood control. Continues program activities related to project operations such as land management, hazardous waste, cultural resources, invasive species, recreation management, instrumentation, updating Standing Operating Procedures, and coordination of the emergency management program.

715,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. **4,000**

Reclamation Request \$968,000

Armel Unit Pick-Sloan Missouri Basin Program

LOCATION: The Armel Unit is located in Yuma County in eastern Colorado.

DESCRIPTION/JUSTIFICATION: The Armel Unit is located on the South Fork of the Republican River, and the principal feature is Bonny Dam and Reservoir. The primary purpose of Bonny Dam is protection of the lower South Fork of the Republican River Valley from recurring floods originating upstream from Hale, Colorado. The reservoir provides benefits for recreation and fish and wildlife conservation and enhancement.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; and P.L. 79-526, The Flood Control Act of 1946, July 24, 1946.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Celebrating and Enhancing America's Great Outdoors; Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Protect America's Landscape

Performance Measure: Percent of baseline acres infested with invasive plant species that are controlled

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

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Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$5,000	\$5,000
Land Management and Development	0	0
Facility Operations	373,000	376,000
Facility Maintenance and Rehabilitation	4,000	104,000
Enacted/Request	\$382,000	\$485,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$382,000	\$485,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$382,000	\$485,000

Water and Energy Management and Development - Continues administration and compliance of a repayment contract with the State of Colorado. \$5,000

Facility Operations - Continues day-to-day operations of Bonny Dam for continued delivery of project benefits, including flood control and delivery of water to project water users. Continues program activities related to project operations, such as land management, hazardous waste, weed control, recreation management, resource surveys and reports, and coordination of the emergency management program at Bonny Reservoir. Updates Standing Operating Procedures for Bonny Dam.

376,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. Increase in funding due to Spillway Concrete Void work beginning at Bonny Dam.

104,000

Reclamation Request \$485,000

Belle Fourche Unit Pick Sloan Missouri Basin Program

LOCATION: The Belle Fourche Unit is located in Butte and Meade Counties of western South Dakota.

DESCRIPTION/JUSTIFICATION: The principal structure consists of Belle Fourche Dam and Reservoir, 94 miles of irrigation canals, 450 miles of laterals, and 323 miles of drains. This is a reauthorized project which provides the following benefits: restoration of reliability of the system; reduced annual operation and maintenance costs; conservation of irrigation water through reduction of seepage losses and operational wastes; equitable and efficient distribution of the water supply; safety features for the protection of human life; restoration of design capacity to avoid overloading and risk of system failure; reclamation of agricultural lands affected by seepage losses; and continued social and economic welfare of the area.

AUTHORIZATION: P.L. 98-157, Belle Fourche Irrigation Project, November 17, 1983; and P.L. 103-434, Title IX, Belle Fourche Irrigation Project, October 31, 1994.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Celebrating and Enhancing America's Great Outdoors; Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Protect America's Landscape

Performance Measure: Percent of baseline acres infested with invasive plant species that are controlled

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$186,000	\$186,000
Land Management and Development	84,000	84,000
Facility Operations	666,000	691,000
Facility Maintenance and Rehabilitation	340,000	334,000
Enacted/Request	\$1,276,000	\$1,295,000
Non-Federal	224,000	224,000
Prior Year Funds	0	0
Total Program	\$1,500,000	\$1,519,000
Prior Year Funds/Non-Federal	(224,000)	(224,000)
Total Reclamation Allotment	\$1,276,000	\$1,295,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide project-wide support for the planning and implementation of effective water conservation measures with the Belle Fourche Irrigation District. \$286.000

Non-Federal Participation – Belle Fourche Irrigation District (100,000)

Subtotal, Water and Energy Management and Development

\$186,000

Land Management and Development - Continues the cost-share program for the development and rehabilitation of public use facilities that will comply with health, safety, and accessibility standards.

168,000 (84,000)

Non-Federal Participation – South Dakota Game, Fish, and Parks

Subtotal, Land Management and Development

84,000

Facility Operations - Continues day-to-day operation of Belle Fourche Dam and Reservoir for delivery of project benefits, including delivery of water to project water users. Continues program activities related to project operations, such as land management, hazardous waste, cultural resources, recreation management, updating Standing Operating Procedures, and coordination of the emergency management program.

731,000

Non-Federal Participation – Belle Fourche Irrigation District

(40,000)

Subtotal, Facility Operations

691,000

Facility Maintenance and Rehabilitation - Continues road repairs at popular recreation areas at the Belle Fourche Reservoir. Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements.

334,000

Reclamation Request \$1,295,000

Bostwick Unit Pick-Sloan Missouri Basin Program

LOCATION: The Bostwick Unit is located in Harlan, Franklin, Webster, and Nuckolls Counties in southern Nebraska; and Jewell, Republican, and Cloud Counties in northern Kansas.

DESCRIPTION/JUSTIFICATION: Bostwick Unit extends from Orleans, Nebraska, above Harlan County Lake, to Concordia, Kansas and includes lands on both sides of the Republican River. Features include: Harlan County Dam and Reservoir on the Republican River (constructed by the U.S. Army Corps of Engineers); Lovewell Dam and Reservoir on White Rock Creek; one diversion dam, six pumping plants, and the canals, laterals and drains necessary to serve 64,955 irrigable acres. The reservoir, lake, and surrounding land of the Division provide for flood control, irrigation, sediment control, fish and wildlife enhancement, and recreation.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goals: Manage Water and Watersheds for the 21st. Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$244,000	\$244,000
Land Management and Development	118,000	118,000
Fish and Wildlife Management and Development	10,000	3,000
Facility Operations	872,000	861,000
Facility Maintenance and Rehabilitation	10,000	33,000
Enacted/Request	\$1,254,000	\$1,259,000
Non-Federal	542,000	542,000
Prior Year Funds	0	0
Total Program	\$1,796,000	\$1,801,000
Prior Year Funds/Non-Federal	(542,000)	(542,000)
Total Reclamation Allotment	\$1,254,000	\$1,259,000

Water and Energy Management and Development - Continues to provide incentives for initiation and implementation of innovative conservation measures and demonstration projects identified in conservation plans or those measures promoting effective water management and conservation. Provides for the administration and compliance of repayment contracts with Bostwick Irrigation District in Nebraska, and Kansas-Bostwick Irrigation District in Kansas. \$412,000 Non-Federal Participation - Bostwick Irrigation District (168,000)

Subtotal, Water and Energy Management and Development

\$244,000

118,000

Land Management and Development - Continues to provide the cost-share program for the development and rehabilitation of public use facilities at Lovewell Reservoir, which includes modification of facilities to enhance public recreation areas while providing handicap accessibility and improving public safety. 236,000 (118,000)

Non-Federal Participation - Kansas Department of Natural Resources

Subtotal, Land Management and Development

Fish and Wildlife Management and Development - Continues ongoing conservation, enhancement, and management and development activities that benefit fish and wildlife. Continues management of facilities, lands, and in-stream flows for the protection of fish and wildlife. Decrease is offset by an increase in Land Management and Development recreation funding at various projects within P-SMBP to meet the needs of the projects and managing partners. 3,000

Facility Operations - Continues day-to-day operation of Lovewell Dam for delivery of project benefits, including flood control operations and irrigation releases. Continues Reclamation's share of the operation and maintenance costs allocated to irrigation at Harlan County Dam. Continues program activities related to project operations, such as land management, hazardous waste, recreation management, updating the Standing Operating Procedures, and coordination of the emergency management program.

1,117,000

Non-Federal Participation - Corps of Engineers

(256.000)

Subtotal, Facility Operations

861,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. Increase is due to Associated Facility Review for the Bostwick Canal System and Examination of High and Significant Dams Program event scheduled for Lovewell Dam in FY 2017.

33,000

Reclamation Request

\$1,259,000

Boysen Unit Pick-Sloan Missouri Basin Unit

LOCATION: This Boysen Unit is located in Fremont County in northwestern Wyoming, on the Wind River about 20 miles south of Thermopolis.

DESCRIPTION/JUSTIFICATION: The major features of the project are Boysen Dam, Reservoir, and Powerplant. Irrigation was not included as an integral part of the Boysen Unit; however, the reservoir is essential to irrigation in the Wind River Basin above the reservoir and the Bighorn Basin below the reservoir. The powerplant has an installed capacity of 15,000 kilowatts developed by two 7,500- kilowatt generators.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Celebrating and Enhancing America's Great Outdoors; Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Protect America's Landscapes

Performance Measure: Percent of baseline acres infested with invasive plant species that are controlled

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$69,000	\$69,000
Land Management and Development	162,000	162,000
Facility Operations	1,812,000	1,822,000
Facility Maintenance and Rehabilitation	16,000	50,000
Enacted/Request	\$2,059,000	\$2,103,000
Non-Federal	219,000	220,000
Prior Year Funds	0	0
Total Program	\$2,278,000	\$2,323,000
Prior Year Funds/Non-Federal	(219,000)	(220,000)
Total Reclamation Allotment	\$2,059,000	\$2,103,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues water conservation field services; negotiation and administration of water marketing, including long-term contract negotiations with two irrigation districts and two entities; administration of contracts for nine irrigation districts and twenty-two entities; and temporary water service contracts. \$109,000

Non-Federal Participation - Highland Hanover,

and Upper Bluff Irrigation Districts

(40,000)

Subtotal, Water and Energy Management and Development

\$69,000

Land Management and Development - Continues the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards at Boysen Reservoir.

324,000

Non-Federal Participation - State of Wyoming

(162,000)

Subtotal, Land Management and Development

162,000

Facility Operations - Continues day-to-day operation of Boysen Dam and Reservoir, including a 15-megawatt powerplant, for continued delivery of project benefits. Benefits include hydroelectric power, delivery of water to project water users, and hydrologic monitoring and record-keeping related to flood operations. Continues land resource management activities related to facility operations, such as cultural resource management, invasive species control, public safety and management of hazardous materials, including implementation of a resource management plan for the reservoir area. Continues renewal of contracts with project water users. Continues administration of agreements for grazing with Bureau of Land Management and Midvale Irrigation District, and recreation fish and wildlife management agreements with Wyoming Game and Fish, and Wyoming State Parks and Historic Sites. Continues emergency action plan preparation.

Non-Federal Participation - Highland, Hanover, Upper Bluff,

(18,000)

and Owl Creek Irrigation Districts

Subtotal, Facility Operations

1.822,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures and for bridge and landslide inspection activities to ensure public safety and compliance with Federal/State Code requirements. The Facility Maintenance request varies depending on the need for replacements, additions, and extraordinary maintenance requirements. Increase is due to Associated Facility Reviews requirements in 2017.

Reclamation Request \$2,103,000

Buffalo Bill Dam Modification Pick-Sloan Missouri Basin Program

LOCATION: This unit is located in northwestern Wyoming in Park County.

DESCRIPTION/JUSTIFICATION: Buffalo Bill Dam, on the Shoshone River about six miles upstream from Cody, Wyoming, is a concrete arch structure of constant radius. The structural height is 350 feet and the volume is 87,515 cubic yards. It is one of the first high concrete dams built in the United States. The reservoir impounds approximately 646,000 acre-feet of water. The principle features include Shoshone Powerplant, Buffalo Bill Powerplant, Spirit Mountain Energy Dissipater, and Diamond Creek, North Fork and South Fork Dikes.

AUTHORIZATION: P.L. 97-293, Buffalo Bill Dam and Reservoir Modifications, Title I, October 12, 1982; and P.L. 102-575, Reclamation Projects Authorization and Adjustment Act of 1992, Title I, October 30, 1992

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$8,000	\$8,000
Land Management and Development	24,000	24,000
Facility Operations	2,641,000	2,651,000
Facility Maintenance and Rehabilitation	28,000	96,000
Enacted/Request	\$2,701,000	\$2,779,000
Non-Federal	24,000	24,000
Prior Year Funds	0	0
Total Program	\$2,725,000	\$2,803,000
Prior Year Funds/Non-Federal	(24,000)	(24,000)
Total Reclamation Allotment	\$2,701,000	\$2,779,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues negotiation and administration of water marketing, including administration of a contract with the State of Wyoming. \$8,000

Land Management and Development - Continues the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards at Buffalo Bill Reservoir. \$48,000

Non-Federal Participation - State of Wyoming

(24,000)

Subtotal, Land Management and Development

24,000

Facility Operations - Continues day-to-day operation of Buffalo Bill Powerplant, Shoshone Powerplant, Spirit Mountain Powerplant and energy dissipater, the South and North Fork Dikes, Diamond Creek Dike and Pumping Plant, the Buffalo Bill Visitor Center, and the Buffalo Bill Maintenance Complex for continued delivery of project benefits, including accounting of Buffalo Bill water for administrative purposes. Continues land resource management activities related to the enlarged reservoir and associated lands including grazing management, land permits, trespass, weed control, hazardous materials and waste management, public safety, and recreation and fish and wildlife administration. Continues emergency action plan preparation.

2,651,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures and for bridge and landslide inspection activities to ensure public safety and compliance with Federal/State Code requirements. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. Increase is due to Associated Facility Review requirements in 2017.

96,000

Reclamation Request

\$2,779,000

Canyon Ferry Unit Pick-Sloan Missouri Basin Program

LOCATION: The Canyon Ferry Unit is located in Broadwater and Lewis and Clark Counties of western Montana.

DESCRIPTION/JUSTIFICATION: The principal structures of the Canyon Ferry Unit are the Canyon Ferry Dam and Powerplant which are located about 17 miles northeast of Helena, Montana. Canyon Ferry Dam is located 50 miles downstream from where the Gallatin, Madison, and Jefferson Rivers join to form the Missouri River. The reservoir intercepts the runoff from about 15,860 square miles, and stores the unused floodwater and unappropriated water in a 2,051,000 acre-foot reservoir. Canyon Ferry Powerplant consists of three 16.7 megawatt generating units which produce 50 megawatts of electrical power.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$100,000	\$100,000
Fish and Wildlife Management and Development	146,000	146,000
Facility Operations	4,898,000	4,898,000
Facility Maintenance and Rehabilitation	1,370,000	544,000
Enacted/Request	\$6,514,000	\$5,688,000
Non-Federal	124,000	702,000
Prior Year Funds	0	0
Total Program	\$6,638,000	\$6,390,000
Prior Year Funds/Non-Federal	(124,000)	(702,000)
Total Reclamation Allotment	\$6,514,000	\$5,688,000

Water and Energy Management and Development - Continues water rights adjudication, and water quality monitoring of reservoirs and river releases. Continues issuance and administration of water service contracts. \$105,000

Non-Federal Participation - Helena Valley, Toston, and East Bench Irrigation Districts, and City of Helena

(5,000)

Subtotal, Water and Energy Management and Development

\$100,000

Fish and Wildlife Management and Development - Continues oversight tasks required by Section 7 of the Endangered Species Act to complete consultation on project operation effects on threatened and endangered species. This includes oversight of monitoring fish and wildlife habitat and resources with an emphasis on native, threatened, and endangered species recovery and restoration. Various Federal, State, and environmental groups are placing increased emphasis on what is being referred to as the Missouri River Corridor (Corridor). This Corridor extends from the headwaters of the Missouri River to Fort Peck Reservoir.

Facility Operations - Continues day-to-day operation of Canyon Ferry Dam, Powerplant, and government camp for project benefits, including power (generation consists of 50 megawatts of power), flood control, river regulation, and delivery of project water for irrigation and municipal and industrial purposes, and facility program requirements including instrumentation, Standing Operating Procedures, and emergency management. Continues operation of recreation areas to meet minimum health and safety standards, as prescribed under the Canyon Ferry Act P.L. 105-277, Title X. Continues program activities related to project operations such as land management, concessions management, cultural resources, hazardous waste, recreation management, wildlife management, Standing Operating Procedures, instrumentation, and emergency management.

4,922,000

Non-Federal Participation - Helena Valley, Toston, and East Bench Irrigation Districts and City of Helena

(24,000)

Subtotal, Facility Operations

4,898,000

Facility Maintenance and Rehabilitation – Includes funding for metalwork recoating and upgrade plant and dam electrical distribution systems. Continues facility examinations, and power operation and maintenance reviews to ensure structural integrity relating to safe and reliable operations of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements. Decrease is due to award of the construction contract in FY 2016 for the Dust Abatement Dike System Repair and Stabilization and the Metalwork Recoating. 1,217,000

Non-Federal Power Items – Includes funding for replacing

Powerplant roof, and Control Room Ceiling Replacement

(673,000)

Subtotal, Facility Operations

<u>544,000</u>

Reclamation Request

\$5,688,000

Cedar Bluff Unit Pick-Sloan Missouri Basin Program

LOCATION: The Cedar Bluff Unit is located in Ellis and Trego Counties in Kansas.

DESCRIPTION/JUSTIFICATION: The Cedar Bluff Unit is on the north side of Smokey Hill River, 18 miles southwest of Ellis, Kansas. It consists of the earth-filled Cedar Bluff Dam and Reservoir. The reservoir's storage capacity and the Smokey Hill River flows provide up to 2,000 acre-feet of water annually for the City of Russell.

AUTHORIZATION: The Cedar Bluff Unit was authorized by P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; and reformulated under Title IX of P.L 102-575, The Reclamation Projects Authorization and Adjustment Act of 1992, October 12, 1992.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$10,000	\$10,000
Land Management and Development	25,000	25,000
Fish and Wildlife Management and Development	0	5,000
Facility Operations	543,000	531,000
Facility Maintenance and Rehabilitation	4,000	10,000
Enacted/Request	\$582,000	\$581,000
Non-Federal	25,000	25,000
Prior Year Funds	0	0
Total Program	\$607,000	\$606,000
Prior Year Funds/Non-Federal	(25,000)	(25,000)
Total Reclamation Allotment	\$582,000	\$581,000

Water and Energy Management and Development – Provides for administration and compliance of contracts with the State of Kansas and the City of Russell. \$10,000

Land Management and Development – Utilizes the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards.

\$50,000 (25,000)

Non-Federal Participation – Kansas Department of Wildlife Subtotal, Land Management and Development

25,000

Fish and Wildlife Management and Development – Provides for coordination of activities associated with conservation, enhancement, development and restoration of fish and wildlife populations and their habitats.

5,000

Facility Operations – Continues day-to-day operation of Cedar Bluff Dam for delivery of project benefits, including flood control and delivery of water to project water users. Continues program activities related to project operations, such as land management, hazardous waste, recreation management, and coordination of the emergency management program.

531,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements.

10,000

Reclamation Request \$581,000

Dickinson Unit Pick-Sloan Missouri Basin Program

LOCATION: The Dickinson Unit is located in Stark County of southwestern North Dakota.

DESCRIPTION/JUSTIFICATION: The major features of the Dickinson Unit are Dickinson Dam and Edward Arthur Patterson Lake, which provide for municipal and industrial water for the City of Dickinson, as well as flood control, fish and wildlife, and recreation benefits.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Land Management and Development	\$212,000	\$212,000
Facility Operations	379,000	379,000
Facility Maintenance and Rehabilitation/	14,000	190,000
Enacted/Request	\$605,000	\$781,000
Non-Federal	15,000	15,000
Prior Year Funds	0	0
Total Program	\$620,000	\$796,000
Prior Year Funds/Non-Federal	(15,000)	(15,000)
Total Reclamation Allotment	\$605,000	\$781,000

WORK PROPOSED FOR FY 2017:

Land Management and Development - Continues preparation of a Resource Management Plan (RMP) for Dickinson Reservoir lands, land use inventories, assembling data, evaluating alternatives, conducting public involvement meetings, and preparing an environmental assessment. **\$212,000**

Facility Operations - Continues day-to-day operations of Dickinson Dam for delivery of project benefits, including flood control and delivery of water to project water users. Continues program activities related to project operations, such as land management, hazardous waste, recreation management, updating Standing Operating Procedures, and coordination of the emergency management program. Increase is due to higher costs associated with operation and maintenance of equipment and aging infrastructure.

\$394,000

Non-Federal Participation – City of Dickinson

(15,000)

Subtotal, Facility Operations

379,000

Facility Maintenance and Rehabilitation – Continues work on the Bascule Gate recoating and gate seals replacement. Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. Increase is due to recoating of Bascule Gate and replacing the gate seals.

190,000

Reclamation Request \$781,000

East Bench Unit Pick-Sloan Missouri Basin Program

LOCATION: The East Bench Unit is in southwestern Montana along the Beaverhead River in Beaverhead and Madison counties.

DESCRIPTION/JUSTIFICATION: The principal features include Clark Canyon Dam and Reservoir, Barretts Diversion Dam, East Bench Canal, and a system of laterals and drains. Clark Canyon Dam and Reservoir stores water for release into the Beaverhead River for downstream irrigation. Barretts Diversion Dam, 11 miles below Clark Canyon, diverts water from the Beaverhead River to the East Bench and Canyon Canal to serve irrigation of lands.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; and P.L. 79-526, The Flood Control Act of 1946, July 24, 1946.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$181,000	\$181,000
Fish and Wildlife Management and Development	21,000	21,000
Facility Operations	648,000	648,000
Facility Maintenance and Rehabilitation	13,000	4,000
Enacted/Request	\$863,000	\$854,000
Non-Federal	190,000	190,000
Prior Year Funds	0	0
Total Program	\$1,053,000	\$1,044,000
Prior Year Funds/Non-Federal	(190,000)	(190,000)
Total Reclamation Allotment	\$863,000	\$854,000

Water and Energy Management and Development - Continues water rights adjudication, efficiency incentive programs, and water quality monitoring on Clark Canyon Reservoir. \$186,000 Non-Federal Participation – East Bench Irrigation District,

and Clark Canyon Water Supply Company

(5,000)

Subtotal, Facility Operations

\$181,000

Fish and Wildlife Management and Development - Continues oversight of monitoring fish and wildlife habitat and resources with emphasis on native, threatened and endangered species recovery and restoration.

21,000

Facility Operations - Continues Reclamation's payment to the operating entity, East Bench Irrigation District, for continued day-to-day operation expenses of Clark Canyon Dam for project benefits related to reservoir operations. Continues program activities related to project operations such as land management, cultural resources, recreation management, Standing Operating Procedures, instrumentation, public safety, and emergency management.

833,000

Non-Federal Participation - East Bench Irrigation District, and Clark Canyon Water Supply Company

(185,000)

Subtotal, Facility Operations

648,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies dependent upon the need for replacements, additions and extraordinary maintenance requirements. **4,000**

Reclamation Request \$854,000

Frenchman-Cambridge Unit Pick-Sloan Missouri Basin Program

LOCATION: The Frenchman-Cambridge Unit is located in Chase, Hayes, Hitchcock, Frontier, Red Willow, Furnas, and Harlan Counties of southwestern Nebraska.

DESCRIPTION/JUSTIFICATION: The Frenchman-Cambridge Unit extends from Palisade southeastward along the Frenchman River, and from Trenton eastward along the Republican River to Orleans and Alma. Storage facilities consist of Enders Dam and Reservoir, Medicine Creek Dam/Harry Strunk Lake, Red Willow Dam/Hugh Butler Lake, and Trenton Dam/Swanson Lake. Benefits provided by the Frenchman Cambridge Unit include irrigation, flood control, fish and wildlife, and recreation.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$152,000	\$152,000
Land Management and Development	160,000	160,000
Fish and Wildlife Management and Development	23,000	13,000
Facility Operations	1,841,000	1,808,000
Facility Maintenance and Rehabilitation	224,000	34,000
Enacted/Request	\$2,400,000	\$2,167,000
Non-Federal	230,000	230,000
Prior Year Funds	0	0
Total Program	\$2,630,000	\$2,397,000
Prior Year Funds/Non-Federal	(\$230,000)	(\$230,000)
Total Reclamation Allotment	\$2,400,000	\$2,167,000

Water and Energy Management and Development - Continues administration and compliance of repayment contracts with Frenchman Valley, Hitchcock and Red Willow, and Frenchman-Cambridge Irrigation Districts. Continues to provide assistance in the evaluation of proposed conservation measures and demonstration projects identified in conservation plans which promote effective water management and conservation.

\$222,000

Non-Federal Participation - Frenchman-Cambridge Irrigation District (70,000)

Subtotal, Water and Energy Management and Development

\$152,000

Land Management and Development - Continues to provide the cost-share program for the development and rehabilitation of public use facilities at Hugh Butler, Swanson, Enders, and Harry Strunk Reservoirs, which includes modification of facilities to enhance public recreation areas while providing handicap accessibility and improving public safety. Campsite Utility Improvements include upgrading out dated electrical hook-ups with new pedestals that meet current electrical codes. Installation of public fishing access docks will meet ADA standards to provide fishing opportunities for people with disabilities.

320,000

Non-Federal Participation - State of Nebraska, Local Partners (160,000)

Subtotal, Land Management and Development

160,000

Fish and Wildlife Management and Development - Continues ongoing conservation, enhancement, and management and development activities that benefit fish and wildlife. Continues management of facilities, lands, and in-stream flows for the protection of fish and wildlife.

13,000

Facility Operations - Continues day-to-day operations of Enders Dam, Medicine Creek Dam, Trenton Dam, and Red Willow Dam for delivery of project benefits, including flood control, and delivery of water to project users. Continues the cooperative agreement for cultural resource surveys and inventory at Harry Strunk Lake and project areas. Continues program activities related to project operations, such as land management, hazardous waste, recreation management, coordination of the emergency management program, and updating Standing Operating Procedures.

1,808,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. Decrease is due to rescheduling the Medicine Creek and Trenton Spillway repairs.

34,000

Reclamation Request

\$2,167,000

Garrison Diversion Unit Pick-Sloan Missouri Basin Program

LOCATION: Garrison Diversion Unit water supply facilities are located in the central and eastern part of North Dakota and include McLean, Burleigh, Sheridan, Wells, Foster, Stutsman, LaMoure, and Dickey Counties. The municipal, rural, and industrial (MR&I) water program provides benefits statewide, including four Indian reservations.

DESCRIPTION/JUSTIFICATION: Major features of the project, currently existing in various states of completion, include Jamestown Dam and Reservoir, Snake Creek Pumping Plant, McClusky Canal, New Rockford Canal, and James River Feeder Canal. The Dakotas Water Resource Act (DWRA) of 2000 was passed by the 106th Congress and further amends the 1965 Garrison Diversion Unit (GDU) authorization. The DWRA deauthorizes all but approximately 75,000 acres of the irrigation originally included in the project and increases construction ceilings for Indian and non-Indian (MR&I) water supplies by about \$600 million (\$200 million for the State MR&I program, \$200 million for the Indian MR&I program, and \$200 million for a Red River Valley Feature). DWRA also authorizes an additional \$25 million for the Natural Resources Trust fund (in addition to the original \$12 million), for a total of \$37 million in Federal contributions. GDU was originally authorized in 1965, amended in 1986 by the Garrison Reformulation Act, and again in 2000 by the DWRA. Issues historically related to the project are the transfer of water, and thus the potential transfer of biota from the Missouri River Basin to the Hudson Bay Basin (Canada), and diversion of water from the Missouri River - an issue with downstream states.

This project is a multipurpose project principally providing tribal and non-tribal MR&I along with fish and wildlife, recreation and flood control benefits in the State of North Dakota.

AUTHORIZATION: P.L. 89-108, Garrison Diversion Unit, Missouri River Basin Project, August 5, 1965; P.L. 98-360, Making Appropriations for Energy and Water Development for the fiscal year ending September 30, 1985, and for other purposes, July 16, 1984; P.L. 99-294, Garrison Diversion Unit Reformulation Act, May 12, 1986; P.L. 102-575, Title XVII, Irrigation on Standing Rock Indian Reservation, North Dakota, and Title XXXV, Three Affiliated Tribes and Standing Rock Sioux Tribe Equitable Compensation Act, October 20, 1992; and P.L. 105-62, Title II, Energy and Water Development Appropriations Act for FY 1998, October 13, 1997; P.L. 105-245, Title II, Energy and Water Development Appropriations Act for FY 1999, October 7, 1999; P.L. 106-60, Title II, Energy, Water Development Appropriations Act for FY 2000, September 29, 1999; P.L. 106-554 (H.R. 4577) Title VI, Dakota Water Resources Act of 2000, December 21, 2000; and P.L. 110-161, Consolidated Appropriations Act, 2008; Energy and Water Development and Related Agencies Act, 2010, October 28, 2009.

COMPLETION DATA: As of September 30, 2015, construction was approximately 72 percent complete. The Federal government has committed 72 percent of its maximum authorized cost-share towards completing the rural water portion of the project; the non-Federal sponsor has committed 100 percent of its minimum cost-share requirement. Indexing for inflation will continue to adjust these cost-share amounts until they are paid in full.

Across the country, State, local and Tribal governments are taking a greater leadership role in water resources investments, including financing projects that the Federal government would have in the past. Constrained Federal budgets do not preclude the ability of non-Federal parties to invest in water resources infrastructure and the Department stands ready to support that effort.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's

Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

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Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$16,406,000	\$16,406,000
Facility Operations	6,729,000	7,118,000
Facility Maintenance and Rehabilitation	14,000	4,000
Enacted/Request	\$23,149,000	\$23,528,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$23,149,000	\$23,528,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$23,149,000	\$23,528,000

Total Costs Information (Rural Water ONLY)*

	Total Estimated Cost	Total to 9/30/15		FY 2017	Balance to Complete
Reclamation	\$862,644,000	\$533,647,669	\$7,400,000	\$7,400,000	\$314,196,331
Non-Federal 3/	136,257,000	136,257,000	0	0	\$0
Total	\$998,901,000	\$669,904,669	\$7,400,000	\$7,400,000	\$314,196,331

Total Costs Information (Non-Rural Water) *

	Total Estimated Cost	1000100		FY 2017	Balance to Complete
Reclamation	\$1,111,959,000	\$627,929,487	\$9,006,000	\$9,006,000	\$466,017,513
Non-Federal . 1/. 2/3	147,701,000	63,383,326	0	0	\$84,317,674
Total	\$1,259,660,000	\$691,312,813	\$9,006,000	\$9,006,000	\$550,335,187

^{*} Includes costs associated with the authorized appropriation ceiling.

Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Irrigation	\$369,719,000	\$369,719,000
Power	39,000	39,000
Municipal and Industrial Water, Unused capacity	NA	NA
Municipal and Industrial Water	995,106,000	995,106,000
Recreation	28,379,000	28,379,000
Fish and Wildlife	22,195,000	22,195,000
Unused Principal Supply Works Capacity	291,821,000	291,821,000
Unused Jamestown Reservoir Capacity (Flood Control)	37,064,000	37,064,000
Flood Control	NA	NA
Wildlife O&M Trust	0	0
Natural Resources Trust	40,603,000	40,603,000
Highway Improvements	4,942,000	4,942,000
Cultural Resources	0	0
Natural Resources	NA	NA
Deauthorized features	98,013,000	98,013,000
OM&R of completed facilities	162,722,000	162,722,000
Total	\$2,050,603,000	\$2,050,603,000

The total cost includes non-Federal funds for recreation cost-sharing \$13,350,000; land donated by the Garrison Diversion Conservancy District \$208,000; Wetlands Trust funds of \$1,200,000 and \$76,000,000 for Fort Berthold Irrigation for a total of \$90,758,000. The total cost also includes assigned costs of Pick-Sloan Missouri Basin power and storage of \$26,140,000; reimbursable interest during construction for municipal, rural, and industrial water supply of \$25,822,000; highway improvement costs of \$4,942,000; Jamestown assignments of \$39,000 for a total of \$56,943,000.

²/ The costs spent to date include the non-Federal costs of \$5,326,326 for recreation, \$1,200,000 for Natural Resources Trust, and \$207,966 of donated land, \$56,649,034 of Federal assigned and miscellaneous costs discussed above for a total of \$63,383,326.

^{3/}The non-Federal ceiling for MR&I water supply has been met. Over the years, Reclamation tracked the non-Federal cost-share over and above what is required by law. Remaining non-Federal balance to complete is for non-rural water activities only.

METHODOLOGY: The interim cost allocation was revised in May 2012. The changes are reflected in the above table. The decrease is due to the removal of Red River Valley Water Supply System. The Red River Valley Water Supply Project, as proposed in the Final Environmental Impact Statement (December 2007) and Comprehensive Report to Congress (November 2008) is not authorized for construction. Therefore, the Garrison Diversion Unit's latest interim cost allocation report (May 2012) does not include the proposed Red River Valley Water Supply Project. In addition, the OM&R trust is authorized to be established upon the commencement of operation of the Red River Valley Water Supply Project and has been removed from the cost allocation until that time.

APPROPRIATION CEILING: Appropriations authorized are \$1,683,186,381 (October 2015). In addition, appropriations authorized by P.L. 89-108 prior to enactment of P.L. 99-294 are \$291,418,619. This amounts to a total authorized appropriation of \$1,974,603,000 which is equal to the comparable Federal obligation.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

<u>Rural Water Component</u> - Continues oversight of preconstruction and construction activities on approved State MR&I. This program is managed and prioritized by the State of North Dakota. Funds will be used for continued construction of the State's highest priority MR&I projects to address water supply issues and water quality needs to meet Safe Drinking Water Act Standards. \$3,700,000

Continues oversight of preconstruction and construction activities on approved tribal MR&I systems to extend distribution systems to rural tribal communities and homes that have poor water quality and inadequate supply.

3,700,000

The rural water portion of the Garrison project is composed of both a State and tribal component. This appropriation ceiling was authorized by the DWRA to be indexed as necessary to allow for ordinary fluctuations of construction costs as indicated by applicable engineering cost indices.

Non-Rural Water Components - Contributes funds to the Natural Resources Trust Fund (5 percent of State M&I and Red River). 232,000

Performs necessary investigations and contract actions to assist in the development of irrigation in the Turtle Lake and McClusky Canal-side irrigation areas. 200,000

Provides for ongoing operation and maintenance of mitigation features on Arrowwood, Audubon, and National Wildlife Refuges and provide for ongoing operation and maintenance of wildlife lands required by GDU legislation.

2,191,000

Continues minimum maintenance to assure reliability of completed facilities still in construction status and minimum maintenance of the supply system that is required to deliver water under contract and to maintain freshening flows. Work includes routine, ongoing maintenance, canal slide repair and beach belting to ensure reliable water delivery capabilities.

6,304,000

Continues ongoing construction of GDU recreation facilities authorized by GDU legislation. Work includes oversight and coordination activities to plan, design, construct, maintain and effectively manage the recreation areas, including agreements with managing partners, leasing agreements, public involvement, and field reviews.

79,000

Subtotal, Water and Energy Management and Development

\$16,406,000

Facility Operations -

<u>Rural Water Component</u> - Continues Garrison Diversion Indian MR&I routine operation and maintenance activities including administrative support and oversight necessary to operate water treatment plants,

reservoirs, water distribution systems, and associated facilities in accordance with the safe drinking water act and (EPA) regulations. Continues water treatment and distribution, water quality monitoring, required record keeping, public safety, and National Environmental Policy Act and cultural resource compliance.

6,410,000

Non-Rural Water Component - Continues operation of Jamestown Dam for flood control operations and continued delivery of project water to downstream users. 708,000

Subtotal, Facility Operations

7,118,000

Facility Maintenance and Rehabilitation –

Non-Rural Water Components - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions, and extraordinary maintenance requirements. Decrease is due to a revised O&M Facility Review requirement.

Subtotal, Facility Maintenance and Rehabilitation

4,000

Reclamation Request

\$23,528,000

Glen Elder Unit Pick-Sloan Missouri Basin Program

LOCATION: The Glen Elder Unit of the Solomon Division is located in Mitchell, Osborne, Cloud and Ottawa Counties of north-central Kansas.

DESCRIPTION/JUSTIFICATION: The Glen Elder Unit is located in the Solomon River Valley and consists of Glen Elder Dam and Lake Waconda, as well as protective dikes and appurtenant structures. Benefits provided by the Glen Elder Unit include irrigation, flood control, fish and wildlife, recreation, and municipal and industrial water. The Glen Elder Unit supplies water to approximately 10,300 acres and supplies water for two Cities.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; and P.L. 79-526, The Flood Control Act of 1946, July 24, 1946.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$15,000	\$14,000
Land Management and Development	45,000	45,000
Fish and Wildlife Management and Development	6,000	6,000
Facility Operations	1,019,000	1,085,000
Facility Maintenance and Rehabilitation	139,000	153,000
Enacted/Request	\$1,224,000	\$1,303,000
Non-Federal	45,000	45,000
Prior Year Funds	0	0
Total Program	\$1,269,000	\$1,348,000
Prior Year Funds/Non-Federal	(45,000)	(45,000)
Total Reclamation Allotment	\$1,224,000	\$1,303,000

Water and Energy Management and Development – Provides for the administration and compliance of contracts with the Glen Elder Irrigation District, the City of Beloit, and Rural Water District No. 2. Continues to provide technical assistance in the evaluation of proposed conservation measures and demonstration projects identified in conservation plans which promote effective water management and conservation. \$14,000

Land Management and Development – Utilizes the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards. Installation of a water treatment facility to provide safe drinking water to park facilities and users. Water treatment facilities will include holding tanks, pumps, and treatment equipment. \$90,000 Non-Federal Participation – Kansas Department of Wildlife (45,000)

Subtotal, Land Management and Development

45,000

Fish and Wildlife Management and Development – Continues ongoing conservation, enhancement, and management and development activities that benefit fish and wildlife. Continues management of facilities, lands, and in-stream flows for the protection of fish and wildlife. **6,000**

Facility Operations – Continues day-to-day operations of Glen Elder Dam and Waconda Lake for delivery of project benefits, including flood control and delivery of water to project water users. Continues program activities related to project operations, such as land management, hazardous waste, recreation management, updating the Standing Operating Procedures, and coordination of the emergency management program.

1,085,000

Facility Maintenance and Rehabilitation – Includes funding for spillway concrete repairs. Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements.

153,000

Reclamation Request \$1,303,000

Heart Butte Unit Pick-Sloan Missouri Basin Program

LOCATION: The Heart Butte Unit is located in Grant and Morton Counties of south-central North Dakota

DESCRIPTION/JUSTIFICATION: The major features of the Heart Butte Unit are Heart Butte Dam and Lake Tschida, 29 river pumping plants, 1 relift plant, and 17 miles of laterals to provide for irrigation, flood control, fish and wildlife and recreation benefits.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$10,000	\$10,000
Land Management and Development	72,000	72,000
Facility Operations	842,000	842,000
Facility Maintenance and Rehabilitation	354,000	105,000
Enacted/Request	\$1,278,000	\$1,029,000
Non-Federal	72,000	72,000
Prior Year Funds	0	0
Total Program	\$1,350,000	\$1,101,000
Prior Year Funds/Non-Federal	(72,000)	(72,000)
Total Reclamation Allotment	\$1,278,000	\$1,029,000

Water and Energy Management and Development - Continues to provide assistance to irrigation districts with implementation of innovative activities identified in their conservation plans. \$10,000

Land Management and Development – Utilizes the cost-share program for the development and rehabilitation of public use facilities that comply with health safety and accessibility standards.

\$144,000

Non-Federal Participation – Tri-Cities Joint Job Development Authority

(72,000)

Subtotal, Land Management and Development

72,000

Facility Operations - Continues day-to-day operation of Heart Butte Dam for delivery of project benefits, including flood control and delivery of water to project beneficiaries. Continues operation, oversight, coordination, and planning required to conduct the management activities on project lands, including recreation management, public safety, accessibility, cultural resources, hazardous waste management operations, and coordination of the emergency management program.

842,000

Facility Maintenance and Rehabilitation – Includes funding for seepage monitoring and repair. Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. Decrease reflects award of construction contract for the seepage repair project.

Reclamation Request \$1,029,000

Helena Valley Unit Pick-Sloan Missouri Basin Program

LOCATION: The Helena Valley Unit is located in Lewis and Clark County in central Montana, adjoining the city of Helena, 3.5 miles west of Canyon Ferry Dam on the Missouri River.

DESCRIPTION/JUSTIFICATION: The Helena Valley Unit water supply is discharged from Canyon Ferry Reservoir, 17 miles east of Helena on the Missouri River. Helena Valley Pumping Plant, below Canyon Ferry Dam, lifts water by turbine-driven pumps to the Helena Valley Tunnel and into Helena Valley Dam and Reservoir. Other major features of the development are a canal, lateral, and drain system to furnish water to 16,440 acres of land and for municipal use.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; and P.L. 79-526, The Flood Control Act of 1946, July 24, 1946.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$13,000	\$13,000
Land Management and Development	6,000	6,000
Facility Operations	151,000	151,000
Facility Maintenance and Rehabilitation	13,000	4,000
Enacted/Request	\$183,000	\$174,000
Non-Federal	11,000	11,000
Prior Year Funds	0	0
Total Program	\$194,000	\$185,000
Prior Year Funds/Non-Federal	(11,000)	(11,000)
Total Reclamation Allotment	\$183,000	\$174,000

Water and Energy Management and Development - Continues to provide project-wide support of effective water conservation measures with Reclamation water districts. Also provides for water rights adjudication and water quality monitoring. \$13,000

Land Management and Development – Utilizes the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards.

\$12,000

Non-Federal Participation - Montana Fish, Wildlife & Parks

(6,000)

Subtotal, Land Management and Development

6.000

Facility Operations - Continues day-to-day operation of Helena Valley Dam and Reservoir and Helena Valley Main Canal for delivery of water to project beneficiaries. Continues operation of oversight tasks associated with providing minimal level of resource management. Actions include reclassification and determination of ineligible lands, withdrawal reviews, cooperative agreements, issuance of permits, and compliance checks for environmental and cultural resources mandates. Continues program activities related to project operations such as implementation and coordination of emergency management and public safety programs, and Standing Operating Procedures.

156,000

Non-Federal Participation - Helena Valley Irrigation District (5,000)

Subtotal, Facility Operations

151,000

Facility Maintenance and Rehabilitation - Continues facility examinations and associated facility reviews to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements.

4,000

Reclamation Request \$174,000

Kansas River Area Pick-Sloan Missouri Basin Program

LOCATION: The Kansas River Area is located in Nebraska, Kansas, and Colorado. The counties for Nebraska are Chase, Franklin, Frontier, Furnas, Harland, Hayes, Hitchcock, Nuckolls, Red Willow, and Webster. The counties for Kansas are Barton, Decatur, Ellsworth, Graham, Jewell, McPherson, Mitchell, Ness, Norton, Osborne, Ottawa, Phillips, Republic, Rooks, Rush, Sheridan, and Smith. The county for Colorado is Yuma.

DESCRIPTION/JUSTIFICATION: This program represents activities associated primarily with the Republican River, Solomon River, and North Loup River in Nebraska and Kansas. These activities encompass a large area that benefits several Pick-Sloan Units. Types of shared activities performed under this project are Supervisory Control and Data Acquisition (SCADA) and the cost of operating equipment. An allocation has been set up in the Kansas River Area Project to distribute costs to individual projects based on the percentage of benefits assigned to each one.

Water-related issues confronting resource managers in Kansas include: ensuring a sustainable water supply for its residents; a continued water supply for agricultural needs; assuring Native American water supply interests are satisfied; protecting endangered species; ensuring reliability of storage and conveyance systems; and a multitude of water quality issues.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Facility Operations	\$100,000	\$100,000
Enacted/Request	\$100,000	\$100,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$100,000	\$100,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$100,000	\$100,000

Facility Operations – Continues day to day operations of the Kansas River Area dams including Bostwick Unit, Frenchman-Cambridge Division, Armel Unit, Kirwin Unit, Cedar Bluff Unit, Webster Unit, Almena Unit and Glen Elder Unit. Also provides program activities related to project operations such as water delivery, land management, hazardous waste, and recreation management. **\$100,000**

Reclamation Request \$100,000

Keyhole Unit Pick-Sloan Missouri Basin Program

LOCATION: The Keyhole Unit is located in Crook County in northeast Wyoming.

DESCRIPTION/JUSTIFICATION: The Keyhole Unit, consisting of Keyhole Dam and Reservoir, is located on the Belle Fourche River about 17 miles northeast of Moorecroft, Wyoming. Keyhole Reservoir provides a supplemental water supply to the Belle Fourche Project located about 146 miles downstream in western South Dakota. Water for the Belle Fourche Project is released into the Belle Fourche River and then diverted for project purposes. Water is also furnished to the Crook County Irrigation District which is located downstream of the dam. The unit provides storage for irrigation, flood control, fish and wildlife conservation, recreation, sediment control and municipal and industrial water supply.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; P.L 299, an act making supplemental appropriations for the fiscal year ending September 30, 1948, July 31, 1947.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Celebrating and Enhancing America's Great Outdoors; Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Protect America's Landscape

Performance Measure: Percent of baseline acres infested with invasive plant species that are controlled

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Land Management and Development	\$198,000	\$198,000
Facility Operations	556,000	573,000
Facility Maintenance and Rehabilitation	13,000	4,000
Enacted/Request	\$767,000	\$775,000
Non-Federal	198,000	198,000
Prior Year Funds	0	0
Total Program	\$965,000	\$973,000
Prior Year Funds/Non-Federal	(198,000)	(198,000)
Total Reclamation Allotment	\$767,000	\$775,000

WORK PROPOSED FOR FY 2017:

Land Management and Development - Continues the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards at Keyhole Reservoir. \$396,000

Non-Federal Participation – State of Wyoming (198,000)

Subtotal, Land Management and Development

\$198,000

Facility Operations - Continues day-to-day operation of Keyhole Dam and Reservoir for delivery of project benefits, including flood control operations and delivery of water to downstream water users. Continues program activities related to project operations, such as land management, hazardous waste, cultural resources, recreation management, instrumentation, updating standing operating procedures, and coordination of the emergency management program. **573,000**

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. **4,000**

Reclamation Request \$775,000

Kirwin Unit Pick-Sloan Missouri Basin Program

LOCATION: The Kirwin Unit is located in Phillips, Smith, and Osborne Counties of northeastern Kansas.

DESCRIPTION/JUSTIFICATION: The Kirwin Unit is located along the North Fork of the Solomon River. The unit features include Kirwin Dam and Reservoir; Kirwin Main, North and South Canals; and a lateral and drainage system used to serve 11,465 irrigable acres. In addition to irrigation benefits provided by the unit, it protects the downstream area from floods, conserves and enhances fish and wildlife, and provides recreation opportunities.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; and P.L. 79-526, The Flood Control Act of 1946, July 24, 1946.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$32,000	\$32,000
Fish and Wildlife Management and Development	4,000	5,000
Facility Operations	384,000	448,000
Facility Maintenance and Rehabilitation	24,000	24,000
Enacted/Request	\$444,000	\$509,000
Non-Federal	20,000	20,000
Prior Year Funds	0	0
Total Program	\$464,000	\$529,000
Prior Year Funds/Non-Federal	(20,000)	(20,000)
Total Reclamation Allotment	\$444,000	\$509,000

Water and Energy Management and Development - Continues to provide technical assistance in the evaluation of proposed conservation measures and demonstration projects identified in conservation plans which promote effective water management and conservation. Provides for the administration and compliance of repayment contracts with the Kirwin Irrigation District. \$52,000

Non-Federal Participation – Nebraska Game and Parks,

Kansas Department of Wildlife, and Colorado Parks and Wildlife (20,000)

Subtotal, Water and Energy Management and Development

\$32,000

Fish and Wildlife Management and Development - Continues ongoing conservation, enhancement, and management and development activities that benefit fish and wildlife. Continues management of facilities, lands and in-stream flows for the protection of fish and wildlife. **5,000**

Facility Operations - Continues day-to-day operations of Kirwin Dam and Reservoir for delivery of project benefits, including flood control and delivery of water to project water users. Continues program activities related to project operations, such as land management, hazardous waste, recreation management, updating Standing Operating Procedures, and coordination of the emergency management program.

448,000

Facility Maintenance and Rehabilitation – Continues painting of the spillway gates. Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies dependent upon the need for replacements, additions and extraordinary maintenance requirements.

24,000

Reclamation Request \$509,000

Lower Marias Unit Pick-Sloan Missouri Basin Program

LOCATION: The Lower Marias Unit, the only unit of the Marias Division, is located in Liberty and Toole counties of north-central Montana along the Marias River.

DESCRIPTION/JUSTIFICATION: Tiber Dam and Dike and Lake Elwell are the major features of the Lower Marias Unit. The Lower Marias Unit provides multipurpose benefits including flood control, irrigation and municipal and industrial water supply, recreation, and fish and wildlife.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; P.L. 92-371, Increased Authorization, Missouri River Basin Project, August 10, 1972.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$46,000	\$46,000
Land Management and Development	20,000	20,000
Fish and Wildlife Management and Development	36,000	36,000
Facility Operations	1,468,000	1,468,000
Facility Maintenance and Rehabilitation	145,000	168,000
Enacted/Request	\$1,715,000	\$1,738,000
Non-Federal	20,000	20,000
Prior Year Funds	0	0
Total Program	\$1,735,000	\$1,758,000
Prior Year Funds/Non-Federal	(20,000)	(20,000)
Total Reclamation Allotment	\$1,715,000	\$1,738,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues water quality monitoring of inflows and lake waters. Continues issuance and administration of water service contracts. \$46,000

Land Management and Development - Continues development of recreation areas to include shade shelters and road improvements through Title 28 agreements. \$40,000

Non-Federal Participation – Liberty County (20,000)

Subtotal, Land Management and Development

20,000

Fish and Wildlife Management and Development - Continues oversight of monitoring fish and wildlife habitat and resources with an emphasis on native, threatened, and endangered species recovery and restoration. Various Federal, State, and environmental groups are placing increased emphasis on what is being referred to as the Missouri River Corridor (Corridor). This Corridor extends from the headwaters of the Missouri River (of which the Marias River is a tributary) to Fort Peck Reservoir. **36,000**

Facility Operations - Continues day-to-day operation of Tiber Dam for delivery of project benefits, including reservoir operations. Continues program activities related to project operations such as land management, cultural resources, recreation management, Standing Operating Procedures, instrumentation, public safety, emergency management, and developing a comprehensive inventory of asbuilt drawings.

1,468,000

Facility Maintenance and Rehabilitation – Includes funding for the rehabilitation of the Tiber Marina boat ramp and repair of the spillway gantry crane. Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures, and for landslide inspection activities to ensure public safety and compliance with Federal/State Code requirements. The Facility Maintenance and Rehabilitation request varies dependent upon the need for replacements, additions and extraordinary maintenance requirements.

168,000

Reclamation Request \$1,738,000

Missouri Basin O&M Pick-Sloan Missouri Basin Program

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: This activity provides funding for efficient management of Reclamation's Operation and Maintenance Program. There is a need for consistency and standardization in how Reclamation performs its day-to-day activities in the area and regional offices. The activity will assist offices in Reclamation to increase awareness of the kinds of business practices that are necessary to be fiscally responsible and accountable to the taxpayers. In addition, the activity will assist in fulfilling agency goals and objectives in water resources management.

AUTHORIZATION: The Reclamation Act, June 17, 1902; P.L. 104-134.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$1,028,000	\$1,028,000
Facility Operations	269,000	273,000
Enacted/Request	\$1,297,000	\$1,301,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$1,297,000	\$1,301,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$1,297,000	\$1,301,000

Water and Energy Management and Development - Continues management related requirements in recognition of the Area Managers' role in corporate policy, budget, and program formulation activities including: interagency activities, attendance at meetings, public involvement in activities that cannot be identified to a specific project, and managerial training and leadership meetings. \$1,028,000

Facility Operations - Continues Reclamation's payments of wheeling costs associated with the Pick-Sloan Project use pumping power, power rate and repayment studies for payment by the power customers, and activities related to coordination between Reclamation, Western Area Power Administration, and the U.S. Army Corps of Engineers on the Missouri River Mainstem Reservoir System.

273,000

Reclamation Request \$1,301,000

Narrows Unit Pick-Sloan Missouri Basin Program

LOCATION: The Narrows Unit is located along the South Platte River about seven miles northwest of Fort Morgan in western Morgan County, Colorado.

DESCRIPTION/JUSTIFICATION: The Narrows Unit is an authorized, but never constructed feature of the Missouri River Basin Project, now known as the Pick-Sloan Missouri Basin Program. Approximately 2,300 acres of land was acquired by Reclamation for construction of the Narrows Unit. The land is currently managed for agricultural leasing purposes.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; P.L. 88-442, Increased Authorization Missouri River Basin Project, August 14, 1964; P.L. 91-389, Narrows Unit, Missouri River Basin project, August 28, 1970.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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Activity	FY 2016 Enacted	FY 2017 President's Budget
Activity	Enacted	Fresident's Budget
Facility Operations	\$36,000	\$36,000
Enacted/Request	\$36,000	\$36,000
Non-Federal	5,000	5,000
Prior Year Funds	0	0
Total Program	\$41,000	\$41,000
Prior Year Funds/Non-Federal	(5,000)	(5,000)
Total Reclamation Allotment	\$36,000	\$36,000

WORK PROPOSED FOR FY 2017:

Facility Operations - Continues land management of properties owned and operated by Reclamation. Management activities include well repairs, water rights and assessments, and other activities related to administration of the agricultural leases associated with the Narrows Dam Project lands.

\$41,000

Non-Federal Participation – Colorado Parks and Wildlife

(5,000)

Reclamation Request \$36,000

North Loup Unit Pick-Sloan Missouri Basin Program

LOCATION: This unit is located in central Nebraska along the North Loup and Loup Rivers. Facilities are located in Loup and Garfield Counties, and the irrigable lands are located in Valley, Greeley, Howard, Merrick, and Nance Counties.

DESCRIPTION/JUSTIFICATION: Principal features of the unit include Calamus Dam and Reservoir, Kent Diversion Dam, Davis Creek Dam and Reservoir, five principal canals, one major and several small pumping plants, laterals, and a drain system. The authorized plan provides for direct surface water service to 55,116 acres of land. Operation of diversions will provide a sustained ground water supply for development of an additional 17,000 acres by private investment. In addition to irrigation, the unit provides recreation and fish and wildlife benefits.

AUTHORIZATION: P.L. 92-514, The Reclamation Project Authorization Act of 1972, October 20, 1972.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$53,000	\$53,000
Land Management and Development	30,000	30,000
Fish and Wildlife Management and Development	6,000	6,000
Facility Operations	125,000	106,000
Facility Maintenance and Rehabilitation	17,000	15,000
Enacted/Request	\$231,000	\$210,000
Non-Federal	45,000	45,000
Prior Year Funds	0	0
Total Program	\$276,000	\$255,000
Prior Year Funds/Non-Federal	(45,000)	(45,000)
Total Reclamation Allotment	\$231,000	\$210,000

Water and Energy Management and Development - Continues technical assistance in the evaluation of proposed conservation measures and demonstration projects identified in conservation plans which promote effective water management and conservation. Provides for the administration and compliance of repayment contracts with the Twin Loups Irrigation District and the Twin Loups Reclamation District.

\$68,000

Non-Federal Participation – Nebraska Game and Parks, Kansas Department of Wildlife, Colorado Parks and Wildlife, and Nebraska Natural Resources (1

(15,000)

Subtotal, Water and Energy Management and Development

\$53,000

Land Management and Development – Utilizes the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards.

60,000

Non-Federal Participation – Nebraska Game and Parks, Nebraska Natural Resources

(30,000)

Subtotal, Land Management and Development

30,000

Fish and Wildlife Management and Development – Continues ongoing conservation, enhancement, and management and development activities that benefit fish and wildlife. Continues management of facilities, lands, and in-stream flows for the protection of fish and wildlife. **6,000**

Facility Operations - Continues program activities related to project operations, such as land management, hazardous waste, and recreation management, updating the Standing Operating Procedures at Virginia Smith and Davis Creek Dams, and coordination of the emergency management program.

106,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements.

15,000

Reclamation Request \$210,000

North Platte Area Pick-Sloan Missouri Basin Program

LOCATION: The North Platte Area consists of two units: The Glendo Unit is located in Natrona, Converse, and Platte Counties on the North Platte River in eastern and central Wyoming. The Kortes Unit is located in Carbon County of central Wyoming.

DESCRIPTION/JUSTIFICATION: The Glendo Unit is a multiple-purpose natural resource development. It consists of Glendo Dam, Reservoir and Powerplant, Fremont Canyon Powerplant, and Gray Reef Dam and its reregulating reservoir. The unit features, which are located on the North Platte River in eastern and central Wyoming, are adjacent to and work in conjunction with other units of the Pick-Sloan Missouri Basin Program, as well as the Kendrick and North Platte Projects. The unit furnishes a maximum of 40,000 acre-feet of water annually from Glendo Reservoir for irrigation in Wyoming and Nebraska, and electrical power is supplied to Wyoming, Colorado, and Nebraska by Glendo and Fremont Canyon Powerplants, which have installed capacities of 38,000 and 66,800 kilowatts, respectively.

The Kortes Unit of the Pick-Sloan Missouri Basin Project, consisting of Kortes Dam, Reservoir, and Powerplant, is in central Wyoming in a narrow gorge of the North Platte River, 2 miles below Seminoe Dam in the Kendrick Project, and about 60 miles southwest of Casper, Wyoming. It was the first unit initiated by the Bureau of Reclamation under the Missouri River Basin Project. The 36,000-kilowatt powerplant generates an average of over 160 million kilowatt-hours annually.

AUTHORIZATION: P.L. 78-534; The Flood Control Act of 1944 December 22, 1944; P.L. 83-503, Missouri River Basin Project, July 16, 1954; Reservoir Public Law 85-695.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$72,000	\$71,000
Fish and Wildlife Management and Development	39,000	38,000
Facility Operations	4,926,000	5,056,000
Facility Maintenance and Rehabilitation	86,000	64,000
Enacted/Request	\$5,123,000	\$5,229,000
Non-Federal	2,380,000	37,000
Prior Year Funds	0	0
Total Program	\$7,503,000	\$5,266,000
Prior Year Funds/Non-Federal	(2,380,000)	(37,000)
Total Reclamation Allotment	\$5,123,000	\$5,229,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues water conservation field services and negotiations and administration of water marketing for eleven Glendo water contracts.

\$96,000

Non-Federal Participation – Enterprise Irrigation District

(25,000)

Subtotal, Water and Energy Management and Development

\$71,000

Fish and Wildlife Management and Development - Continues preparation of draft report, draft
National Environmental Policy Act document information, draft Endangered Species Act (ESA)
Biological Assessment information and draft Fish and Wildlife Coordination Act (FWCA) Report on
review of existing Platte River Projects (both North and South Platte River). These efforts ensure that
Reclamation operations are not likely to jeopardize the continued existence of threatened and endangered
species or to adversely modify or destroy critical habitat as required by the ESA.

38,000

Facility Operations – Continues day-to-day operation of Glendo Dam, Glendo Powerplant, Fremont Powerplant, and Gray Reef Dam and outlet works for delivery of project benefits, including delivery of water to project users and operation of the powerplants. Continues day-to-day operation of Kortes Powerplant, Kortes Dam, and the Supervisory Control System for delivery of project benefits, including delivery of project water to users, powerplant operation, and hydrologic data monitoring regarding flood control. Continues land resource management activities related to facility operations of the existing facilities and for resource preservation. In 1992, Reclamation assumed management of the Kortes Miracle Mile Facility from the State of Wyoming on the Kortes Unit. In 1995, Reclamation assumed management of a portion of the Glendo Reservoir area from the Wyoming State Parks. Continues cultural resource protection and surveys; management of hazardous materials and wastes; emergency action plans; and administration of management agreements for recreation, fish and wildlife with Wyoming Game and Fish, Natrona County, and Wyoming State Parks and Historic sites.

5,068,000

Non-Federal Participation – Water Users (Glendo Contractors, Pacificorp)

(12,000)

Subtotal, Facility Operations

5.056,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures, and for bridge and landslide activities to ensure public safety and compliance with Federal/State Code requirements. The Facility Maintenance and Rehabilitation request varies dependent upon the need for replacements, additions and extraordinary maintenance requirements.

64,000

Reclamation Request \$5,229,000

Oahe Unit Pick-Sloan Missouri Basin Program

LOCATION: The Oahe Unit is located in Sully, Hughes, Spink, and Beadle Counties of north-central South Dakota.

DESCRIPTION/JUSTIFICATION: The principal supply works authorized for the Oahe Unit includes the Oahe Pumping Plant, 214 miles of main canals, three regulating reservoirs, James Diversion Dam and Reservoir, James Pumping Plant on the James River, and the Byron Pumping Plant at Byron Reservoir. Other irrigation works include 955 miles of distribution laterals, 935 miles of open drains, and 2,970 miles of closed drains, relift pumping plants, and electrical distribution facilities for providing energy to operate the major pumping plants. The reservoir, lake, and surrounding lands provide for flood control, irrigation, municipal and industrial water, fish and wildlife enhancement, and recreation.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944, as supplemented and extended by P.L. 79-526, The Flood Control Act of 1946, July 24, 1946; P.L. 88-442; Increased Authorization, Missouri River Basin Project, August 14, 1964; and P.L. 90-453, Oahe Unit, Missouri River Basin Project, August 3, 1968.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$36,000	\$36,000
Land Management and Development	0	0
Facility Operations	58,000	71,000
Enacted/Request	\$94,000	\$107,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$94,000	\$107,000
Prior Year Funds/Non-Federal	0	
Total Reclamation Allotment	\$94,000	\$107,000

Water and Energy Management and Development - Continues minimum maintenance to ensure reliability of completed facilities still in construction status and minimum maintenance of the supply system. Continues inspection and general construction oversight. The Oahe Pumping Plant, Pierre Canal, and the Blunt Reservoir lands require basic maintenance to protect the Federal investment.

\$36,000

Facility Operations – Continues day-to-day operation of Blunt Reservoir for project benefits. Continues activities related to project operations, such as land management, contracts, categorical exclusion certification preparation, and special permits. Continues National Environmental Policy Act and cultural resource compliance, weed control, land use inventories, grants, and Indian Trust Asset consultation.

71,000

Reclamation Request \$107,000

Owl Creek Unit Pick-Sloan Missouri Basin Program

LOCATION: Owl Creek is located in Hot Springs County in north central Wyoming, west and north of the city of Thermopolis.

DESCRIPTION/JUSTIFICATION: Owl Creek heads in the Absaroka Mountains and flows eastward, north of the Owl Creek Mountains, joining the Bighorn River six miles north of Thermopolis. The unit comprises a narrow valley extending about 30 miles westerly from the mouth of Owl Creek. The development provides supplemental water to 12,740 acres of irrigated land. Principal features of the development include Anchor Dam and Reservoir and pumping facilities to deliver water to the three distinct areas of the unit. The water supplied from Anchor Reservoir is augmented during periods of short supply by pumping from the Bighorn River. Livestock production is the major enterprise in the unit. The unit provides multipurpose benefits, including irrigation, fish and wildlife and recreation opportunities.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$6,000	\$6,000
Facility Operations	87,000	87,000
Facility Maintenance and Rehabilitation	9,000	18,000
Enacted/Request	\$102,000	\$111,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$102,000	\$111,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$102,000	\$111,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development –Continues negotiation and administration of water marketing activities. \$6,000

Facility Operations - Continues Reclamation's payments to the operating entity, Owl Creek Irrigation District, for delivery of project benefits, including hydrologic monitoring and reporting related to Anchor Dam. Continues program activities related to project operations such as land resource management, cultural resources, recreation management activities, and emergency action plans at Anchor Dam and Reservoir.

87,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. Increase is due to a required Associated Facility Review in FY 2017.

18,000

Reclamation Request \$111,000

Rapid Valley Unit Pick-Sloan Missouri Basin Program

LOCATION: The Rapid Valley Unit is located in Pennington County in southwestern South Dakota.

DESCRIPTION/JUSTIFICATION: The Rapid Valley Unit consists of Pactola Dam and Reservoir located on Rapid Creek about 15 miles west of Rapid City, South Dakota. Pactola Reservoir provides the major water supply for Rapid City, including Ellsworth Air Force Base; flood protection along Rapid Creek; fish and wildlife benefits; and recreation opportunities. Pactola Reservoir supplements the supply of stored water available from Deerfield Reservoir to provide for irrigation and municipal purposes.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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Activity	FY 2016 Enacted	FY 2017 President's Budget
Facility Operations	\$191,000	\$191,000
Facility Maintenance and Rehabilitation	4,000	4,000
Enacted/Request	\$195,000	\$195,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$195,000	\$195,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$195,000	\$195,000

WORK PROPOSED FOR FY 2017:

Facility Operations - Continues day-to-day operation of Pactola Dam and Reservoir for delivery of project benefits, including flood control operations and delivery of water to downstream water users. Continues program activities related to project operations, such as hazardous waste, updating Standing Operating Procedures, and instrumentation. **\$191,000**

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements.

4,000

Reclamation Request \$195,000

Riverton Unit Pick-Sloan Missouri Basin Program

LOCATION: The Riverton Unit is located in central Wyoming in Fremont County on the ceded portion of the Wind River Indian Reservation.

DESCRIPTION/JUSTIFICATION: The unit lands lie in the Wind River Basin and to the north of the river. Direct flow water from Wind River and stored water from Bull Lake Creek are used to provide irrigation service to approximately 71,000 acres. Unit features are Bull Lake Dam, Pilot Butte Dam, Wind River Diversion Dam, and Pilot Butte Powerplant, together with approximately 100 miles of main canals, 300 miles of laterals, and 644 miles of drains. The unit provides multipurpose benefits, including irrigation, fish and wildlife and recreation opportunities.

AUTHORIZATION: The project was authorized for construction by the Secretary of the Interior on June 19, 1918, under the terms of the Indian Appropriation Act of 1919, approved by the Congress on May 25, 1918. By the act of June 5, 1920, the project was placed under the jurisdiction of the Bureau of Reclamation. On September 25, 1970, P.L. 91-409 reauthorized the project as the Riverton Unit of the Pick-Sloan Missouri Basin Program.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$12,000	\$8,000
Facility Operations	643,000	553,000
Facility Maintenance and Rehabilitation	8,000	13,000
Enacted/Request	\$663,000	\$574,000
Non-Federal	4,000	0
Prior Year Funds	0	0
Total Program	\$667,000	\$574,000
Prior Year Funds/Non-Federal	(4,000)	0
Total Reclamation Allotment	\$663,000	\$574,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development – Continues negotiation and administration of water marketing activities and monitoring of water conservation field services for water management and water accounting. . Decrease is offset by increases at other projects to meet the current water conservation needs of the projects and stakeholders. \$8,000

Facility Operations - Continues with minimal maintenance activities at Pilot Butte Powerplant for delivery of project benefits, including hydrologic monitoring for Bull Lake and Pilot Butte. Continues operation of recreation facility at Pilot Butte, Ocean Lake, Lake Cameahwait, and other sites on Reclamation lands. Continues activities related to project operations such as land resource management; hazardous materials and waste management; administration of fish and wildlife management by Wyoming Game and Fish; and grazing by Midvale Irrigation District and Muddy Ridge Grazing Association. Continues resource management related to tribal oil and gas development on Reclamation lands; cultural resource evaluation and surveys; and preparation of emergency action plans. 553,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures.

13,000

Reclamation Request \$574,000

Shadehill Unit Pick-Sloan Missouri Basin Program

LOCATION: The Shadehill Unit is located in Perkins County of northwestern South Dakota.

DESCRIPTION/JUSTIFICATION: The Shadehill Unit consists of Shadehill Dam and Reservoir on the Grand River located approximately12 miles south of Lemmon, South Dakota. Facility operation provides for the continued ongoing operation of Shadehill Dam for flood control, irrigation, fish and wildlife conservation, recreation and silt detention.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Land Management and Development	\$75,000	\$75,000
Facility Operations	465,000	452,000
Facility Maintenance and Rehabilitation	4,000	4,000
Enacted/Request	\$544,000	\$531,000
Non-Federal	75,000	75,000
Prior Year Funds	0	0
Total Program	\$619,000	\$606,000
Prior Year Funds/Non-Federal	(75,000)	(75,000)
Total Reclamation Allotment	\$544,000	\$531,000

WORK PROPOSED FOR FY 2017:

Land Management and Development - Continues the cost-share program for the development and rehabilitation of public use facilities that comply with health, safety, and accessibility standards at Shadehill Reservoir. \$150,000

Non-Federal Participation - South Dakota Game Fish and Parks (75,000)

Subtotal, Land Management and Development

\$75,000

Facility Operations – Continues day-to-day operation of Shadehill Dam and Reservoir for delivery of project benefits, including flood control and delivery of project water. Continues operation at recreation areas to meet minimum health and safety standards. Continues program activities related to project operations, such as land resource management, hazardous materials, and waste management. Continues cultural resources, recreation management, updating Standing Operating Procedures, instrumentation, and coordination of the emergency action program.

452,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. **4,000**

Reclamation Request \$531,000

Webster Unit Pick-Sloan Missouri Basin Program

LOCATION: The Webster Unit is located in Rooks and Osborne Counties of north-central Kansas.

DESCRIPTION/JUSTIFICATION: The Webster Unit is located between Woodstone and Osborne, Kansas, on the north side of the South Fork of the Solomon River. Webster Dam, located 8 miles west of the city of Stockton, is the principal feature of the unit. The Woodstone Diversion Dam, four pumping plants, Osborne Canal, laterals, and drains serving 8,537 acres, make up the remainder of the Unit. The project benefits include irrigation, flood control, recreation and fish and wildlife.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944; and P.L. 79-526, The Flood Control Act of 1946, July 24, 1946.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$12,000	\$12,000
Fish and Wildlife Management and Development	0	3,000
Facility Operations	505,000	486,000
Facility Maintenance and Rehabilitation	1,124,000	4,000
Enacted/Request	\$1,641,000	\$505,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$1,641,000	\$505,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$1,641,000	\$505,000

Water and Energy Management and Development - Continues to provide technical assistance in the evaluation of proposed conservation measures and demonstration projects identified in conservation plans which promote effective water management. Provides for the administration and compliance of repayment contract with the Webster Irrigation District. \$12,000

Fish and Wildlife Management and Development – Provides for coordination with the Kansas Department of Wildlife and Parks in management of Fish and Wildlife lands; including: conservation, enhancement, and management of facilities, lands, and in-stream flows for the protection of fish and wildlife.

3,000

Facility Operations – Continues day-to-day operations of Webster Dam and Reservoir for delivery of project benefits, including flood control and delivery of water to project water users. Continues program activities related to project operations such as land management, hazardous waste, recreation management, updating the Standing Operating Procedures, and coordination of the emergency management and universal accessibility programs.

486,000

Facility Maintenance and Rehabilitation – Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions and extraordinary maintenance requirements. Decrease reflects completion of the Webster Spillway Gates Rehabilitation. **4,000**

Reclamation Request

\$505,000

Yellowtail Unit Pick-Sloan Missouri Basin Program

LOCATION: The Yellowtail Unit, the only unit of the Lower Bighorn Division, is located in Big Horn and Carbon counties of south-central Montana and Big Horn county of northern Wyoming.

DESCRIPTION/JUSTIFICATION: Major facilities of the Yellowtail Unit consist of Yellowtail Dam and Bighorn Lake on the Bighorn River, Yellowtail Powerplant at the toe of the dam, and Yellowtail Afterbay Dam which is located 2.2 miles downstream of Yellowtail Dam. Yellowtail Dam is a 525-foot high, thin-arched, concrete structure, located at the mouth of Bighorn Canyon. The reservoir, Bighorn Lake, is approximately 72 miles long at maximum water surface and extends into the Bighorn Basin of Wyoming. The widely varying releases from the Powerplant are regulated by Yellowtail Afterbay Dam. Yellowtail Powerplant consists of four 62.5 megawatt generating units which produce 250 megawatts of electrical power that is marketed through the transmission facilities of the Pick-Sloan Missouri Basin Program. The project is authorized for irrigation, power and recreation benefits.

AUTHORIZATION: P.L. 78-534, The Flood Control Act of 1944, December 22, 1944.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

SUMMARIZED FINANCIAL DATA

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$7,000	\$7,000
Fish and Wildlife Management and Development	15,000	15,000
Facility Operations	6,140,000	6,140,000
Facility Maintenance and Rehabilitation	927,000	640,000
Enacted/Request	\$7,089,000	\$6,802,000
Non-Federal	12,173,000	227,000
Prior Year Funds	0	0
Total Program	\$19,262,000	\$7,029,000
Prior Year Funds/Non-Federal	(12,173,000)	(227,000)
Total Reclamation Allotment	\$7,089,000	\$6,802,000

Water and Energy Management and Development - Continues coordination of activities associated with the Crow Tribe's right to develop hydropower at the Yellowtail Afterbay. \$7,000

Fish and Wildlife Management and Development - Continues oversight of monitoring fish and wildlife habitat and resources with emphasis on native, threatened, and endangered species recovery and restoration.

15,000

Facility Operations - Continues day-to-day operation of Yellowtail Dam and Powerplant, Afterbay Dam, Switchyard, Bighorn Canal Headgates, Government Camp, and Visitor Center. Continues delivery of project benefits, including operation of the Powerplant for generation of 250 megawatts of power and collection of instrumentation data. Continues program activities related to project operations such as water management, land management, public safety, cultural resources and updating the Standing Operating Procedures. Continues coordination of the emergency management program. **6,140,000**

Facility Maintenance and Rehabilitation - Includes funding for rock scaling and removal, upgrading plant and dam electrical distribution system; design work and replacement of the Yellowtail field office building. Continues facility examinations and power operation and maintenance reviews to ensure structural integrity relating to safe and reliable operations of the structures, and for landslide inspections to ensure public safety and Federal/State Code requirements. The Facility Maintenance and rehabilitation request varies depending on the need for replacements, additions, and extraordinary maintenance requirements. Decrease is due to reduced Power O&M facility review requirements.

867.000

<u>Power Items (Non-Federal)</u> - Continues sump pump replacement at Yellowtail Powerplant. Decrease is due to receiving the full non-federal funding for the wear ring replacement in FY 2016.

Non-Federal - Power Customers (227,000)

Subtotal, Facility Maintenance and Rehabilitation

640,000

Reclamation Request

\$6,802,000

Rapid Valley Project

LOCATION: This project is located in Pennington County in southwestern South Dakota.

DESCRIPTION/JUSTIFICATION: Rapid Valley Project consists of Deerfield Dam and Reservoir located on Castle Creek, a tributary of Rapid Creek, about 25 miles west of Rapid City, South Dakota. Deerfield Dam is operated and maintained by Reclamation on a pooled storage basis with Pactola Reservoir, which is located downstream from Deerfield Dam on Rapid Creek.

This project provides flood control benefits and water supply benefits to multiple water users, including Rapid City.

AUTHORIZATION: P.L. 398, Water Conservation and Utilization Act, August 11, 1939.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Facility Operations	\$65,000	\$65,000
Facility Maintenance and Rehabilitation	4,000	4,000
Enacted/Request	\$69,000	\$69,000
Non-Federal	26,000	26,000
Prior Year Funds	0	0
Total Program	\$95,000	\$95,000
Prior Year Funds/Non-Federal	(26,000)	(26,000)
Total Reclamation Allotment	\$69,000	\$69,000

WORK PROPOSED FOR FY 2017:

Facility Operations - Continues operation of Deerfield Dam for flood control and water deliveries to water users, including Rapid City. Costs associated with the operation of Deerfield Dam and Reservoir are reimbursed by the City of Rapid City. Continues work associated with emergency management, hazardous waste, and standing operating procedures. \$91,000

Non-Federal - City of Rapid City (26,000)

Subtotal, Facility Operations

\$65,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies depending on the need for replacements, additions, and extraordinary maintenance requirements.

4,000

Reclamation Request \$69,000

Rocky Boy's/North Central Montana Rural Water System

LOCATION: The Rocky Boy's/North Central Montana Rural Water System is located in Hill County and Chouteau County in northern Montana about 40 miles (64 km) from the Canadian border.

DESCRIPTION/JUSTIFICATION: The Rocky Boy's Indian Reservation (Chippewa-Cree Tribe) has a total land area of 171.4 square miles (443.9 km), which includes extensive off-reservation trust lands. It is the smallest reservation in Montana and was created in 1916. Its largest community is Box Elder, although a small part of Box Elder is located off-reservation. The rural water system will provide infrastructure to ensure existing water systems within the project service area are in compliance with Federal Safe Drinking Water Act regulations. A core pipeline will provide potable water from Tiber Reservoir to the Rocky Boys Reservation, while non-core pipelines will serve 21 surrounding towns and/or rural water districts. At full build-out, the system will serve a total estimated population of 43,000 (14,000 on-reservation, 29,000 off-reservation). The cost of the non-Federal share will be split between a grant from the State of Montana and a loan obtained by the North Central Montana Regional Water Authority. Operation, maintenance, and replacement for the core and on-Reservation systems will be funded by a \$20 million trust fund established with Bureau of Indian Affairs appropriations and Chippewa Cree Tribe funds. The non-Tribal systems will fund their operation, maintenance, and replacement separately without Federal assistance. The Final Engineering Report completed a 90-day review by Congress on August 15, 2006.

AUTHORIZATION: P.L. 107-331, Rocky Boy's/North Central Montana Regional Water System Act of 2002, December 13, 2002.

COMPLETION DATA: As of September 30, 2015, Rocky Boy's North Central Rural Water System was approximately 26 percent complete, as financially determined. The Federal Government has committed 26 percent of its cost-share towards completing the project; the non-Federal sponsor has committed 27 percent.

Across the country, State, local and Tribal governments are taking a greater leadership role in water resources investments, including financing projects. Constrained Federal budgets do not preclude non-Federal parties from moving forward with important investments in water resources infrastructure and the Department stands ready to support those efforts.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Extend the Supply of Water Through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's

Priority Goal conservation programs.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$4,625,000	\$3,700,000
Enacted/Request	\$4,625,000	\$3,700,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$4,625,000	\$3,700,000
Underfinancing	0	0
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$4,625,000	\$3,700,000

Summarized Financial Data – Total Cost Information Total Cost Information

	Total Estimated	Total to 9/30/15	EV 2016	EV 2017	Balance to
	Cost		FY 2016	FY 2017	Complete
Reclamation	\$331,985,000	\$81,540,203	\$4,625,000	\$3,700,000	\$242,119,797
Non-Federal	44,897,000	11,318,914	0	0	33,578,086
Total	\$376,882,000	\$92,859,117	\$4,625,000	\$3,700,000	\$275,697,883

^{*} Includes costs associated with the authorized appropriation ceiling.

Summarized Financial Data – Cost Allocation and Methodology Cost Allocation and Methodology

Allocation	FY 2016	FY 2017
Municipal and Industrial	\$374,839,000	\$376,882,000
Total	\$374,839,000	\$376,882,000

APPROPRIATION CEILING: P.L. 107-331 authorized the appropriation of \$229,000,000. At October 2016 price levels, the indexed portion of the Federal ceiling is \$331,985,000; the indexed portion of the non-Federal ceiling is \$44,897,000; with a total indexed ceiling of \$376,882,000. This authorization is adequate to cover the project as currently proposed.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development – Funding enables the Tribes and the non-Federal sponsor, North Central Authority, to perform some construction of the Core system pipeline and design of the water treatment plant and build out of non-core pipeline distribution systems.

Reclamation Request \$3,700,000

SEE APPENDIX FOR: Status of NEPA Compliance

Status of Water Service and Repayment Contracts

San Angelo Project

LOCATION: This project is located in Tom Green County in west Texas.

DESCRIPTION/JUSTIFICATION: The San Angelo Project is in the immediate vicinity of the City of San Angelo in west central Texas. Reclamation development provided for the construction of Twin Buttes Dam and Reservoir, a head works at Nasworthy Reservoir, and an irrigation and distribution system which serves a project area of 10,000 acres.

AUTHORIZATION: P.L. 85-152, San Angelo Project, August 16, 1957.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$38,000	\$38,000
Facility Operations	547,000	562,000
Facility Maintenance and Rehabilitation	5,000	35,000
Enacted/Request	\$590,000	\$635,000
Non-Federal	20,000	20,000
Prior Year Funds	0	0
Total Program	\$610,000	\$655,000
Prior Year Funds/Non-Federal	(20,000)	(20,000)
Total Reclamation Allotment	\$590,000	\$635,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide support to project partners and beneficiaries for the coordination, management, and implementation of water conservation plans and water resources management strategies. Continues the administration of Reclamation water contracts and reviews for contract compliance. \$58,000

Non-Federal - City of San Angelo and Tom Green County Irrigation District (20,000)

Subtotal, Water and Energy Management and Development

\$38,000

Facility Operations - Continues reimbursement to the operating entity, the City of San Angelo, for joint operations costs allocated to fish and wildlife and flood control. Ongoing work activities include emergency management planning, reviewing and updating the project Standing Operating Procedures, dam operator training, and emergency exercise program activities. Continues resource management activities related to facility operation, including recreation planning and development, public safety and universal accessibility compliance, National Environmental Policy Act compliance, and administering land management and hazardous waste programs. Reclamation also coordinates with the City of San Angelo to manage designated fish and wildlife areas at the reservoir for the benefit of fish and wildlife resources and public use visitors.

562,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. Increase is due to dive and toe drain exams at Twin Buttes Dam which are required in FY 2017.

35,000

Reclamation Request \$635,000

SEE APPENDIX FOR: Obligation by Function for Operating Projects

Shoshone Project

LOCATION: This project is located in Bighorn and Park Counties in northwestern Wyoming.

DESCRIPTION/JUSTIFICATION: The Shoshone Project, originally authorized as the Cody Project, is located in northwestern Wyoming near Cody. Features of the project include the original constructed portion of Buffalo Bill Dam and Reservoir, Shoshone Canyon Conduit, Heart Mountain Powerplant, and a network of canals and laterals to deliver water to project lands. Buffalo Bill Dam, Shoshone Canyon Conduit and Heart Mountain Powerplant are operated by Reclamation. The water users operate and maintain the Willwood and Corbett Diversion Dams, Ralston and Deaver Dams, and the irrigation systems. Buffalo Bill Dam is a 350 foot high concrete arch structure impounding Buffalo Bill Reservoir with an active capacity of 604,817 acre feet. Storage water is provided to four Reclamation constructed irrigation districts serving over 93,000 acres, utilizing over 1,400 miles of Reclamation canals, laterals, and drains which the districts operate and maintain. Water is also provided for use by the Shoshone Municipal Pipeline to several communities, including Cody and Powell, Wyoming.

Water to the Shoshone Canyon Conduit enters the 10-foot-diameter concrete lined tunnel that was constructed with the original dam and modified in 1939. New high pressure gates were installed in the conduit in 1991. The conduit conveys pressurized water to the Spirit Mountain Energy Dissipater and Powerplant. From the energy dissipation facilities, flow is returned to the open channel portion of the conduit where it is conveyed to a division works where the flow is distributed to the Heart Mountain Powerplant, the Heart Mountain Canal, and a river overflow siphon. Reclamation manages recreation use at Willwood, Deaver, Ralston, Corbett, and Newton Lakes on the 88,000 acres which are administered for land management by Reclamation on the Project.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 (authorized by the Secretary of the Interior on February 10, 1904); and P.L. 39, Amend Reclamation Project Act of 1939, April 24, 1945 (Heart Mountain was authorized by the Secretary on June 19, 1945), and Americans with Disabilities Act of 1990, July 26th, 1990, (P.L. 101-336).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Powering Our Future and Responsible Use of the Nation's Resources; and Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$72,000	\$76,000
Facility Operations	723,000	722,000
Facility Maintenance and Rehabilitation	6,000	31,000
Enacted/Request	\$801,000	\$829,000
Non-Federal	78,000	82,000
Prior Year Funds	0	0
Total Program	\$879,000	\$911,000
Prior Year Funds/Non-Federal	(78,000)	(82,000)
Total Reclamation Allotment	\$801,000	\$829,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues water conservation field services and negotiation and administration of water marketing which provides for administration of contracts with four irrigation districts and nine entities. \$120,000

Non-Federal – Shoshone and Willwood Irrigation Districts

\$76,000

Subtotal, Water and Energy Management and Development

Facility Operation - Continues operation of Buffalo Bill Dam, Shoshone Canyon conduit and gate, and Heart Mountain Powerplant for delivery of project water to water users and for operation of the powerplants. Also, continues essential services to recreational users at Ralston, Deaver, and Newton Lakes where Reclamation directly provides for recreation. Continues hydrologic recordkeeping and preparation of emergency action plans for Shoshone Project dams. Land resource management activities related to facility operations will continue, including issuance of permits, leases, trespass control and resolution, weed control, cultural resource management and surveys, oil and gas related surface management, and recreation fish and wildlife management with Wyoming State Parks and Historic Sites, City of Cody, and Wyoming Game and Fish, as well as management of hazardous materials.

760,000

(44,000)

Non-Federal - Shoshone Irrigation District

(38,000)

Subtotal, Facility Operations

722,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies dependent upon the need for replacements, additions, and extraordinary maintenance requirements. Increase is due to an Associated Facility Review requirement in FY 2017.

Subtotal, Facility, Maintenance and Rehabilitation

<u>31,000</u>

Reclamation Request

\$829,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Sun River Project

LOCATION: This project is located in Cascade, Lewis & Clark, and Teton Counties in central Montana.

DESCRIPTION/JUSTIFICATION: The project consists of the Greenfields and Fort Shaw Divisions. Principal features are Gibson Dam and Reservoir, Willow Creek Dam and Reservoir, Pishkun Dikes and Reservoir, Sun River Diversion Dam, Fort Shaw Diversion Dam, two supply canals, and six irrigation canals. The project uses the waters of the Sun River and tributaries, stored and regulated by Gibson, Pishkun and Willow Creek Reservoirs for irrigating 91,011 acres of land.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 (authorized by the Secretary of the Interior on February 26, 1906).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$131,000	\$131,000
Fish and Wildlife Management and Development	22,000	22,000
Facility Operations	241,000	241,000
Facility Maintenance and Rehabilitation	12,000	19,000
Enacted/Request	\$406,000	\$413,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$406,000	\$413,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$406,000	\$413,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide project-wide support of effective water conservation measures with Reclamation water districts. Also provides for water rights adjudication and water quality monitoring. \$131,000

Fish and Wildlife Management and Development - Continues oversight of monitoring fish and wildlife habitat and resources with emphasis on native, threatened, and endangered species recovery and restoration. Various Federal, State, and environmental groups are placing increased emphasis on the Missouri River Corridor (Corridor). This Corridor extends from the headwaters of the Missouri River (of which Sun River is a tributary) to the Fort Peck Reservoir.

22,000

Facility Operations - Continues operation of Gibson Dam, Willow Creek Dam, and Pishkun Dikes for delivery of project benefits including emergency management, public safety, instrumentation, and Standing Operating Procedures. Continues land resource management activities associated with facility operations, such as cultural resources and hazardous waste management.

241,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The Facility Maintenance and Rehabilitation request varies dependent upon the need for replacements, additions, and extraordinary maintenance requirements.

19,000

Reclamation Request \$413,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

W. C. Austin Project

LOCATION: This project is located in Greer, Jackson, and Kiowa Counties in southwestern Oklahoma.

DESCRIPTION/JUSTIFICATION: The project features include Altus Dam, the Main, Altus, West, and Ozark Canals, a 218-mile lateral distribution system, and 26 miles of drains. The primary storage unit is Lake Altus, a reservoir formed by a dam across the North Fork of the Red River about 18 miles north of Altus, and by several earth dikes at low places in the reservoir rim. The Main Canal transports water from Lake Altus to the northern boundary of the project's irrigable land. The Lugert-Altus Irrigation District, the Oklahoma Department of Higher Education, and the Oklahoma Department of Wildlife Conservation manage the project.

AUTHORIZATION: P.L. 761, Flood Control Act of 1938, June 28, 1938.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$59,000	\$59,000
Facility Operations	624,000	535,000
Facility Maintenance and Rehabilitation	5,000	4,000
Enacted/Request	\$688,000	\$598,000
Non-Federal	25,000	25,000
Prior Year Funds	0	0
Total Program	\$713,000	\$623,000
Prior Year Funds/Non-Federal	(25,000)	(25,000)
Total Reclamation Allotment	\$688,000	\$598,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide support to project partners and beneficiaries for the coordination, management, and implementation of water conservation plans and water resources management strategies. Continues the administration of Reclamation water contracts and reviews for contract compliance. \$84,000

Non-Federal - Lugert-Altus Irrigation District and Oklahoma Water Resources Board

(25,000)

Subtotal, Water and Energy Management and Development

\$59,000

Facility Operations - Continues reimbursement to the operating entity, the Lugert-Altus Irrigation District, for joint operations costs allocated to flood control. Continues emergency management planning, reviewing and updating the project Standing Operating Procedures, dam operator training, and emergency exercise program activities. Continues resource management activities related to facility operation, including recreation planning and development, public safety and universal accessibility compliance, National Environmental Policy Act compliance, and administering land management and hazardous waste programs. Reduction is due to decreased O&M payment to the Lugert-Altus Irrigation District resulting from efficiency in operations in the emergency management and flood control programs. 535,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures.

4,000

Reclamation Request \$598,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Washita Basin Project

LOCATION: This project is located in Caddo, Grady, Custer, Washita, and Kiowa Counties in western Oklahoma.

DESCRIPTION/JUSTIFICATION: Principal features of the Washita Basin Project include Foss Dam and Reservoir, Fort Cobb Dam and Reservoir, and water conveyance facilities. The Fort Cobb Reservoir Master Conservancy District, the Foss Reservoir Master Conservancy District, the Oklahoma Tourism and Recreation Department, the Oklahoma Department of Wildlife Conservation (Fort Cobb), and the U.S. Fish and Wildlife Services (Foss) at the Washita National Wildlife Refuge manage the project. The Foss Division provides municipal and industrial water to the communities of Clinton, Bessie, Cordell and Hobart. The Fort Cobb Division includes Fort Cobb Reservoir and the Anadarko Aqueduct and provides up to 18,000 acre-feet annually for M&I. The District operates and maintains the facilities of Fort Cobb Dam and the 20.9 mile gravity-flow Anadarko Aqueduct. Other authorized purposes for Fort Cobb Dam and Reservoir include flood control, conservation of fish and wildlife resources, and enhancement of recreational opportunities

AUTHORIZATION: P.L. 84-419, Washita Basin Project, February 25, 1956.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$99,000	\$80,000
Land Management and Development	61,000	164,000
Facility Operations	1,059,000	998,000
Facility Maintenance and Rehabilitation	24,000	8,000
Enacted/Request	\$1,243,000	\$1,250,000
Non-Federal	153,000	154,000
Prior Year Funds	0	0
Total Program	\$1,396,000	\$1,404,000
Prior Year Funds/Non-Federal	(153,000)	(154,000)
Total Reclamation Allotment	\$1,243,000	\$1,250,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide support to project partners and beneficiaries for the coordination, management, and implementation of water conservation plans and water resources management strategies. Continues the administration of Reclamation water contracts and reviews for contract compliance.

\$134,000

Non-Federal - Fort Cobb Master Conservancy District and Foss Reservoir Master Conservancy

(54,000)

Subtotal, Water and Energy Management and Development

\$80,000

Land Management and Development – Funding will be used to improve recreation facilities and to comply with health, safety, and accessibility requirements at the project.

Increase is due to matching the State Parks funding under a cost-share agreement to provide campground and comfort station improvements at Fort Cobb and Foss Reservoirs.

264,000

Non-Federal – Oklahoma Department of Tourism and Recreation (100,000)

Subtotal, Land Management and Development

164,000

Facility Operations - Continues reimbursement to the operating entities, Fort Cobb Reservoir Master Conservancy District and the Foss Reservoir Master Conservancy District, for joint operations costs allocated to flood control. Continues emergency management planning, reviewing and updating the project Standing Operating Procedures, dam operator training, and emergency exercise program activities. Continues resource management activities related to facility operation, including recreation planning and development, public safety and universal accessibility compliance, National Environmental Policy Act compliance, and administering land management and hazardous waste programs. Continues cultural resources site protection activities for resources associated with the Foss and Fort Cobb Reservoir.

998,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. Decrease is due to a toe drain exam at Foss Dam that was required in FY 2016 but not required in FY 2017. **8,000**

Reclamation Request \$1,250,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Wichita Project (Cheney Division)

LOCATION: This project is located in Kingman, Reno, and Sedgwick Counties of south central Kansas.

DESCRIPTION/JUSTIFICATION: The Cheney Division of the Wichita Project consists of Cheney Dam and Reservoir on the North Fork of the Ninnescah River. The City of Wichita constructed and operates a 93-cubic-foot-per-second pumping plant at the dam, which conveys municipal water through a 5-foot-diameter pipeline to the water treatment plant in the city. The City of Wichita and the Kansas Department of Wildlife and Parks manage the project.

AUTHORIZATION: P.L. 86-787, Cheney Division, Wichita Project, September 14, 1960.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$48,000	\$47,000
Land Management and Development	40,000	100,000
Facility Operations	421,000	380,000
Facility Maintenance and Rehabilitation	5,000	4,000
Enacted/Request	\$514,000	\$531,000
Non-Federal	88,000	80,000
Prior Year Funds	0	0
Total Program	\$602,000	\$611,000
Prior Year Funds/Non-Federal	(88,000)	(80,000)
Total Reclamation Allotment	\$514,000	\$531,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to provide support to project partners and beneficiaries for the coordination, management, and implementation of water conservation plans and water resources management strategies. Continues the administration of Reclamation water contracts and reviews for contract compliance.

\$77,000

Non-Federal (30,000)

Subtotal, Water and Energy Management Development

\$47,000

Land Management and Development – Funds will be used to improve recreation facilities and to comply with health, safety, and accessibility requirements at the project. Increase is due to several projects needed to meet these requirements which include replacement of the Chaney State Park office building to meet project needs and accessibility requirements.

150,000

Non-Federal – Kansas Department of Wildlife, Parks, and Tourism

(50,000)

Subtotal, Land and Management and Development

100,000

Facility Operations - Continues emergency management planning, reviewing and updating the project Standing Operating Procedures, and dam operator training. Continues ongoing resource management activities related to facility operation, including fish and wildlife management, recreation planning and development, National Environmental Policy Act compliance, public safety and universal accessibility compliance, and administering land management and hazardous waste programs.

380,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. **4,000**

Reclamation Request \$531,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

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FY 2017 Bureauwide Budget Summary									
(\$ in thousands)									
	FY 2016 FY 2017								
		Water &	Land	Fish &	Facility	Facility	FY 2017	Other Fed/	Total
Project	Enacted 1/	Energy	Mgmt.	Wildlife	Operations	Maint.	Budget	Non-Fed	Program
Dam Safety Program:					•		J		
Safety Evaluation of Existing Dams	20,284					20,284	20,284		20,284
Initiate Safety of Dams Corrective Action	66,500					64,500	64,500		64,500
Department of the Interior Dam Safety Program	1,300					1,300	1,300		1,300
Emergency Planning and Disaster Response Program	1,250				1,250		1,250		1,250
Environmental Program Administration	1,720			1,828	·		1,828		1,828
Examination of Existing Structures	8,809				3,141	5,713			8,854
General Planning Activities	2,000	2,000			·		2,000		2,000
Land Resources Management Program	9,188	,	9,813				9,813		9,813
Miscellaneous Flood Control Operations	817		·		819		819		819
Native American Affairs Program	10,925	10,425					10,425		10,425
Negotiation and Administration of Water Marketing	1,728	1,764					1,764		1,764
Operation and Program Management	2,509	1,132			1,222	434	2,788		2,788
Power Program Services	2,698	2,391			307		2,698		2,698
Public Access and Safety Program	802	593			206		799		799
Reclamation Law Administration	2,323	2,189					2,189		2,189
Recreation and Fish and Wildlife Program Administration	2,202		231	1,958			2,189		2,189
Research and Development:									
Desalination and Water Purification Program	3,455	4,653			1,150		5,803		5,803
Science and Technology Program	16,565	22,765					22,765		22,765
Site Security Activities	26,220				22,104	4,116	26,220	14,889	41,109
WaterSMART Program:									
WaterSMART Grants	20,000	23,365					23,365		23,365
Cooperative Watershed Management	250	1,750					1,750		1,750
Water Conservation Field Services Program	4,239	4,179					4,179		4,179
Basin Studies	5,200	5,200					5,200		5,200
Title XVI - Water Recl and Reuse Program	23,365	21,500					21,500		21,500
Resilient Infrastructure (Climate)	2,500					1,500	-		1,500
Drought Response (Climate)	2,500	4,000					4,000		4,000
WaterSMART Subtotal	58,054	59,994	0	0	0	1,500	61,494	0	61,494
Total - Water and Related Resources	239,349	107,906	10,044	3,786	30,199	97,847	249,782	14,889	264,671

1/Public Law 114-113, the Consolidated Appropriations Act for 2016 provided Reclamation and additional \$166.3 million in six categories including Western Drought Response (\$100.0 million), rural water (\$47.0 million), and four other categories. At the time of budget presentation, these funds had yet to be distributed by program.

BUREAUWIDE FY 2017 OVERVIEW

	FY	2017 BUDGE	Γ FOR WAT	ER AND REL	ATED RESOU	RCES
FY 2016 ¹	Water & Energy	Land Management	Fish & Wildlife	Facility Operations	Facility Maintenance	Total Program
\$239,349,000	\$107,906,000	\$10,044,000	\$3,786,000	\$30,199,000	\$97,847,000	\$249,782,000

¹ The consolidated and Further Continuing Appropriations Act, 2015 provided Reclamation and additional \$96.9 million in six categories including Western Water Drought Response (\$50 million), rural water (\$31 million), and four other categories. At the time of budget preparation, these funds had yet to be distributed by program.

The Bureau of Reclamation FY 2017 budget for the Bureauwide programs for Water and Related Resources totals \$249.8 million, which reflects an increase of \$10.4 million from 2016 enacted. Reclamation funds 19 programs which are formulated at a bureauwide level. An overview of some of these programs follows.

WaterSMART – Planned Accomplishments in 2017 include providing WaterSMART Grants as costshared funding to carry out water and energy efficiency improvements, including projects that save water; increase energy efficiency and the use of renewable energy in water management; support environmental benefits (i.e., that make conserved water available in stream or otherwise address endangered species issues); facilitate and support water markets; and mitigate conflict risk in areas at a high risk of future water conflict. On-the-ground projects may also include implementation of climate adaptation strategies identified in a completed Basin Study. Other projects may result in water delivery improvements that facilitate future on-farm improvements, carried out with the assistance of the Natural Resources Conservation Service, to accomplish coordinated water conservation improvements. Projects that include multiple public benefits are given the greatest consideration for funding. Available funding may also be used to fund other types of WaterSMART Grant projects, such as system optimization reviews that assess the potential for water management improvements. Assistance will be available to States, Tribes, irrigation and water districts, and other entities with water or power delivery authority. Reclamation anticipates funding between 35-45 new WaterSMART Grant projects in FY 2017, including approximately 28 projects that along with projects funded through other programs will contribute to the Priority Goal for Water Conservation.

Reclamation will continue implementation of the Basin Study Program, which contributes to the Department of the Interior's Priority Goal for Climate Change. Through Basin Studies, Reclamation partners with States, Tribes, universities, non-governmental organizations, other Federal agencies, and local governments to develop adaptation and mitigation strategies to address current and future water supply and demand imbalances, while considering the impacts of climate change and other stressors. Through the West-Wide Climate Risk Assessments (WWCRAs) activity under the Basin Study Program, Reclamation will conduct baseline assessments of the risks and impacts from climate change, using a consistent approach across the major Reclamation river basins as identified in the SECURE Water Act. The WWCRAs provide important baseline information that serves as a foundation for future Basin Studies. In addition, Basin Study Program funding supports collaboration between Reclamation and the U. S. Fish and Wildlife Service (FWS) to co-lead the Desert and Southern Rockies LCCs. The Basin Study Program effort is an important part of the framework established through Secretarial Order 3289 to address climate change. In FY 2017, Reclamation will fund one to two Basin Studies and one new WWCRA Impact Assessment, and will support the development of applied science tools and information related to climate adaptation through the LCCs.

Reclamation will provide funding for planning, design, and construction of water recycling and reuse projects through the Title XVI Program. Authorized projects will be identified for funding through criteria that focus on reducing existing diversions or addressing specific water supply issues related to environmental and water quality concerns, and meeting other programs' goals in a cost-effective manner. In 2017, Reclamation will also make funding available for competitively awarded research projects related to water recycling and reuse. In addition, funding will be used for reviews of Title XVI feasibility studies, the coordination of data on program accomplishments, and coordination between regional offices for consistency. Reclamation will continue implementation of the Water Conservation Field Services Program to carry out smaller-scale water conservation improvements.

Reclamation will continue to implement the Cooperative Watershed Management Program. Funding will be used to provide financial assistance for the establishment and expansion of watershed groups, and to implement Phase II of the program by providing funding for watershed management projects in conformance with P.L. 111-11, with an emphasis on ecological resilience, and other environmental issues.

Through the Resilient Infrastructure Program, Reclamation will utilize \$1.5 million to implement the enhanced decision-making framework developed in FY 2015 and select a climate resilient infrastructure investment pilot project to serve as a model for refining the design considerations and the decision making criterion. These actions, along with continued support for Reclamation's Western Watershed Enhancement Partnership (WWEP), will contribute to the climate change adaptation objective of supporting healthy and resilient watersheds.

Reclamation will continue to implement the Drought Response Program that was initiated in FY 2015. Funding will be used to provide assistance to water users to conduct drought contingency planning and to carry out implementation actions to help communities manage drought and develop long-term resilience strategies. In FY 2017, Reclamation anticipates funding drought contingency plans, projects that will build long-term resiliency to drought, and emergency response actions through a competitive selection process.

Expected water savings from WaterSMART Grants, Title XVI, and the Water Conservation Field Services Program funded in 2017, among other water conservation activities, will be applied to meet the Department's Priority Goal for Water Conservation.

<u>Planned Accomplishments in FY 2016</u> Reclamation anticipates funding 33 new WaterSMART Grant projects, including approximately 28 projects that will contribute to the Priority Goal for Water Conservation along with projects funded through other programs

Reclamation will provide financial assistance to establish and expand collaborative watershed groups through the Cooperative Watershed Management Program. In addition, Reclamation will develop criteria for Phase II of the program, which will begin implementation in FY 2017 and will include cost-shared financial assistance for watershed management projects in conformance with P.L. 111-11, with an emphasison ecological resilience and other environmental issues.

Reclamation expects to fund one to two Basin Studies as well as related efforts to meet future water demands such as the Moving Forward effort on the Colorado River. Reclamation will conduct consistent baseline water supply and demand analyses to provide a foundation for future Basin Studies and will conduct pilot studies to evaluate the impacts of climate change on operations through the West-Wide Climate Risk Assessments. Reclamation will work with the FWS to co-lead the implementation of the Desert and Southern Rockies LCCs.

Through the Resilient Infrastructure Program, Reclamation will utilize \$2.5 million to develop an enhanced decision-making framework for selecting climate resilient infrastructure investments to support healthy and resilient watersheds.

Reclamation anticipates providing funding to approximately six authorized Title XVI projects. Funding will also be used to award grants for water reuse research projects. In addition, funding will be used for reviews of Title XVI feasibility studies, the coordination of data on program accomplishments, coordination between regional offices for consistency, and developing means to make the program more efficient and effective.

Expected water savings from WaterSMART Grants, Title XVI, and the Water Conservation Field Services Program, among other water conservation activities, will be applied to meet the Department's Priority Goal for Water Conservation.

<u>Accomplishments in FY2015</u> Reclamation funding was awarded for 50 new WaterSMART Grant projects and 2 ongoing, previously-selected projects. Projects funded under the WaterSMART Grant program in resulted in approximately 82,000 acre-feet of water savings. Reclamation also provided \$23.2 million in Federal funding to seven authorized Title XVI projects, and \$1.6 million for seven new water reclamation and reuse feasibility studies. As part of Reclamation's new Drought Response Program, Reclamation awarded \$1.7 million to 11 entities for the development of comprehensive drought plans and \$3.4 million for 12 drought resiliency projects.

Reclamation also selected two new Basin Studies for funding. These included the Lower Santa Cruz River Basin Study and the Salinas and Carmel Rivers Basin Study. Reclamation completed a West-wide assessment of impacts to irrigation demand and reservoir evaporation and also initiated five reservoir operations pilot studies to support the evaluation of climate change impacts to operations.

Research and Development - Planned Accomplishments in 2017 - for the Science and Technology (S&T) Program include (a) funding approximately 150 Reclamation-led research and development projects to address Reclamation's technical obstacles in water management, hydropower generation, infrastructure management, and environmental stewardship; (b) partnering with Federal and non-Federal entities to sponsor water and power technology prize competitions that address difficult challenges in sustainable infrastructure, ecosystem restoration and water availability; (c) continuing to lead and coordinate Reclamation activities under federal Technology Transfer authorities; and (d) deploying program products to Reclamation end-users, customers, stakeholders and the general public through outreach, dissemination and training. The request includes \$8.5 million for sponsoring water and power technology prize competitions, primarily including the launch of a grand-scale competition focused on next-generation advanced water treatment technologies that would significantly reduce the cost and electricity usage of advanced water treatment. The request also includes \$2 million for research and development under the Open Water Data Initiative that will make Reclamation water and related data better managed, more comparable across locations, and more shareable with other agencies, stakeholders, and the public. Lastly, it includes \$12.3 million to support continued research and development projects, technology transfer, and dissemination/outreach activities addressing critical water and power management technical obstacles in water management, hydropower generation, infrastructure management, and environmental stewardship.

The Desalination and Water Purification Research (DWPR) Program planned accomplishments include funding approximately 15 research studies and approximately 12 development projects to address technical challenges in managing the waste stream produced by advanced water treatment technologies (i.e. concentrate management), developing renewable energy-powered water treatment systems, treating non-traditional water sources, assessing rural water needs, and reducing cost and environmental impacts of desalination. It also includes funding for additional testing for projects that are in the maturation stage to increase the adoption and implementation of clean water treatment technologies to support work addressing the water resource challenges identified in the December 2015 White House white paper, Water Resource Challenges and Opportunities for Water Technology Innovation. Lastly, it includes continued facilitation of technology maturation and adoption through technology transfer activities, and for the continued operation and maintenance (O&M) at Reclamation's Brackish Groundwater National Desalination Research Facility (BGNDRF) in Alamogordo, New Mexico, which is expected to host pilottesting activities involving renewable energy-powered systems, small scale treatment systems, and concentrate disposal.

Planned Accomplishments in 2016 for the S&T Program include funding approximately 150 Reclamation-led research and development projects, launching multiple water and power technology prize competitions (challenges), and continuing technology transfer and product deployment activities. Research and development projects and technology prize competitions will continue to address a wide range of science and technical challenges facing Reclamation water and power managers related the domains of water management, hydropower generation, infrastructure management, and environmental stewardship. Many projects and competitions are addressing science needs that cross-cut domains and relate to advanced water treatment, climate change and variability adaptation, open water data, zebra and quagga mussels, renewable energy, and sustainable water infrastructure and safety.

The DWPR Program planned accomplishments include continuing to address the priorities identified by the 2008 report by the National Academy of Sciences, *Desalination: A National Perspective* by offering competitive funding opportunities for research studies and development projects, and by continuing to support O&M at BGNDRF. Reclamation will also continue to pursue opportunities with industry to license Reclamation-sponsored inventions in membrane and other advanced water treatment technology.

<u>Accomplishments in 2015</u> included the S&T Program funding 131 research and development projects focused on finding solutions to issues facing Reclamation water and power managers and their stakeholders. A listing of funded projects is available at www.usbr.gov/research. The program also supported development of process, procedures and Federal collaborations to sponsor technology prize competitions addressing challenges in water availability, sustainable infrastructure, and ecosystem restoration, with Reclamation launching its first competition as lead sponsor entitled "New Concepts for Remote Fish Detection". Lastly, the program facilitated Reclamation engaging in cooperative research and development agreements and other technology transfer agreements with industry and other non-Federal organizations to test and/or develop new technologies.

The DWPR Program accomplishments included funding a total of five new laboratory research studies, two continuing pilot scale projects, and two new pilot scale projects for a total of nine cooperative agreements with academia, private sector, and non-profit organizations. The program also co-sponsored the grand-scale Desal Prize led by the U.S. Agency for International Development, where the final round of competition was hosted at BGNDRF.

Dam Safety Program – Accomplishments in 2017 include ongoing safety of dams modifications activities at Folsom Dam, Stampede Dam, Nelson Dikes, and Altus Dam. Begins planned modifications at Boca Dam, Box Butte Dam, Bull Lake Dam and Hyatt Dam. Preconstruction and project formulation activities

are planned for several additional dams. Actual projects and funding amounts may be modified based on further review and identification of risk and needs.

Planned Accomplishments in 2016 include ongoing safety of dams modifications activities at Folsom and substantial completion of modifications at Glendo/Guernsey Dam and Echo Dam. Begins planned modification activities at Stampede Dam, Nelson Dikes, Altus Dam, and McKay Dam. Preconstruction and project formulation activities are planned on ten additional dams.

Accomplishments in 2015 had ongoing safety of dam modifications activities at Folsom Dam, Glendo/Guernsey Dams, and Echo Dam. Preconstruction and project formulation activities continued on fourteen additional dams. Actual projects and funding amounts may be modified based on further review and identification of risk and needs.

Site Security – Planned Accomplishments in 2017 – risk reduction at embankment dams, and installation of barriers and other security countermeasures at several mission critical facilities to address formal risk recommendations that were developed and approved through comprehensive security risk assessments and embankment dam vulnerability studies.

Planned Accomplishments in 2016 – replacement of deteriorated boat boom at Hoover Dam; installation of radar, cameras and loud-hailer at Bartlett, Mormon Flat, Stewart Mountain and Horse Mesa Dams, and award of an inter-agency agreement with the U.S. Army Corp of Engineers to complete security work and Grand Coulee Dam and Switchyard.

Accomplishments in 2015 - installed video surveillance systems at four sites, removed and replaced legacy intrusion detection systems at five locations, installed a new intrusion detection/surveillance video integration system at Folsom Dam, and created a Reclamation training lab to standardize electronic access control security and surveillance system protocols across the enterprise. These upgraded projects addressed recommendations that were developed and approved through comprehensive security risk assessments and embankment dam vulnerability studies.

Native American Affairs Program – Planned Accomplishments in 2017-- provide support to the Departmentwide Indian Water rights initiatives, studies and analysis for Indian water rights negotiations, to improve the quality of cost estimates, data gathering, studies, analyses and reviews of settlement options. Base resources are intended to support Federal negotiations in developing the most cost effective options for reaching settlement and meeting tribal trust responsibilities. In addition, Reclamation will continue to provide technical assistance to Tribes in a variety of areas related to water and related resources including: tribal water needs assessments, smaller-scale upgrades and repairs to water supply systems, water quality studies, efficiency improvements, habitat restoration, and groundwater quality and contamination studies, and involvement on Indian water rights settlement negotiation and implementation which include: (1) funding for Reclamation's involvement on 18 Federal water rights negotiation teams, with two extremely active new teams involving the Hualapai and Havasupai Tribes and the Navajo Nation - Utah; (2) funding for Reclamation's involvement on 20 Federal water rights settlement implementation teams, including continued support of a broad array of Reclamation's activities associated with recent water rights settlements (White Mountain Apache, Crow, and Aamodt settlements) for which the settlement acts did not provide full funding for Reclamation involvement.

Planned Accomplishments in 2016-- support ongoing activities related to Indian water rights negotiations and implementation of settlements. Funding will also support Reclamation's involvement on Federal water rights negotiation teams, and recently established teams for Hualapai and Navajo Nation –Utah and provide technical assistance needed in the negotiation process to improve the quality of designs and cost estimates for proposed settlement projects. In addition, funding will support Reclamation's activities

associated with recent water rights settlements (White Mountain Apache, Crow, and Aamodt settlements) as the settlement acts did not fully fund all of Reclamation's activities, and technical assistance to Tribes.

Accomplishments in 2015-- funded technical assistance to Tribes in a variety of areas related to water and related resources including: tribal water needs assessments, smaller-scale upgrades and repairs to water supply systems, water quality studies, efficiency improvements, habitat restoration, and groundwater quality and contamination studies. In addition, Reclamation's involvement on Indian water rights settlement negotiation and implementation included: (1) funding for Reclamation's involvement on 18 Federal water rights negotiation teams, with two very active new teams involving the Hualapai and Havasupai Tribes and the Navajo Nation - Utah; (2) funding for Reclamation's involvement on 20 Federal water rights settlement implementation teams including support for a broad array of Reclamation's activities associated with recent water rights settlements (White Mountain Apache, Crow, and Aamodt settlements) in which the settlement acts did not provide full funding for Reclamation involvement; and (3) technical assistance needed in the negotiation process to improve the quality of designs and cost estimates for proposed settlement projects.

DAM SAFETY PROGRAM

LOCATION: The 17 Western States in Reclamation's Service Area. Work may be performed for other Federal entities throughout the United States on a reimbursable basis.

DESCRIPTION/JUSTIFICATION: The safety and reliability of Reclamation dams continues to be one of Reclamation's highest priorities. The Dam Safety Program is critical to effectively manage risks to the downstream public, property, project, and natural resources.

Funding is requested for two main tasks: the Safety of Dams Evaluation and Modification Program and the Department of the Interior (DOI) Dam Safety Program. The Safety of Dams Evaluation and Modification Program identifies and evaluates safety of dams issues and implements modifications, if warranted, to reduce associated risks to the public. Two sub-tasks comprise the Safety of Dams Evaluation and Modification Program: Safety Evaluation of Existing Dams and Initiate Safety of Dams Corrective Actions. In addition, Reclamation manages the DOI Dam Safety Program, which includes facilitation and guidance to other departmental agencies for their dam safety programs.

Reclamation has reservoirs impounded by 475 dams and dikes. Of these structures, 366 dams and dikes would likely cause loss of life if they were to fail. These 366 structures, located at 243 different project facilities, form the core of Reclamation's Dam Safety Program. Reclamation utilizes the Safety of Dams Act to address dam safety issues related to new hydrologic, seismic or change in state-of-the-art design and construction practices. Approximately 50 percent of Reclamation's dams were built between 1900 and 1950, and approximately 90 percent of the dams were built before currently used state-of-the-art design and construction practices. Dams, which lack state-of-the-art structural reliability features, place a great reliance on monitoring, examinations and re-analyses as ongoing risk management activities to assure safe dam performance. A strong Dam Safety Program must be maintained to identify developing adverse performance within Reclamation's inventory of dams and to carry out corrective actions expeditiously when unreasonable public risk is identified.

The **Safety Evaluation of Existing Dams (SEED)** sub-task provides for performance monitoring, examinations, analyses, field data investigations, and technical studies and development activities on an ongoing or recurring basis for the 366 dams in the program. Program management activities are also included. These activities investigate and assess public safety risks associated with dam safety issues to determine if safety of dams corrective actions are warranted. If corrective actions are warranted, subsequent activities are funded by the Initiate Safety of Dams Corrective Action (ISCA) program.

Adverse performance incidents at Reclamation dams are also investigated as a SEED activity. Actual fiscal year obligations will fluctuate, based on the number and occurrences of incidents and the complexity of investigating each dam safety issue.

SEED activities benefit the public downstream from Reclamation's dams by ensuring prudent and reasonable practices are used to manage risks and to identify dam safety issues. Since these activities benefit the general public, they are not considered a project cost. The SEED program implements the "Federal Guidelines for Dam Safety" as directed by the October 4, 1979, Presidential memorandum.

The **Initiate Safety of Dams Corrective Action (ISCA)** sub-task provides for safety of dams modifications and includes project formulation, approval, preconstruction, and construction activities for Reclamation's dams having identified safety issues. As studies progress on any dam, changes in schedule or scope of work may occur due to increased knowledge of risks, changes in dam performance, or due to the impacts on critical water supplies from interim actions, such as reservoir restrictions. The ISCA funding allows resources to be readily focused on priority structures, based on an evolving identification

of risks and needs. Modification reports, as required by the Reclamation Safety of Dams Act, are prepared and submitted to Congress for modifications, with actual construction costs exceeding \$20 million. Obligation of funds requires 15 percent repayment by project beneficiaries in accordance with the Reclamation Safety of Dams Act and subsequent amendments. Funding for projects subject to final approval and appropriation.

All Safety of Dams (SOD) modifications are funded through the Dam Safety Program. Modification approvals are managed by the Dam Safety Program office. After the modifications are approved, construction is managed by the Regional Offices under the specific project. The approved and underway SOD modifications are listed on the Program Financial Data table.

Dam Safety Program activities in ISCA are workload-driven, based on the estimated scope and needs of specific projects, and funding requests are subject to annual fluctuations.

Corrective Actions Currently Under Construction:

Central Valley Project, Folsom Dam, Folsom Unit, California

The dam safety issues at Folsom Dam are the potential for multiple features that impound the reservoir to be overtopped and fail during large flood events, a potential failure as a result of earthquake shaking, and a potential collapse from seepage problems. Modifications currently under construction consist of an auxiliary spillway and structural strengthening of the various features. Plans for modifications are being closely coordinated with the U. S. Army Corps of Engineers resulting in a Joint Federal Project which will provide increased flood damage control and safety for the city of Sacramento, California.

Planned FY 2017 Corrective Action Construction Starts:

Washoe Project, Boca Dam, CA

The dam safety issues at Boca Dam include the potential deformation of the dam resulting in failure of the dam, dike and failure along the spillway control structure during an earthquake. The risk assessment indicates the dam safety risks associated with these potential failure modes exceed Reclamation public protection guidelines for risk reduction actions. Proposed modifications include construction of a downstream foundation key trench and a filtered berm, as well as strengthening of the spillway control walls.

Mirage Flats Project, Box Butte Dam, Nebraska

The dam safety issues at Box Butte Dam are associated with internal erosion through the foundation of the dam. The risk assessment indicates the dam safety risks associated with these potential failure modes exceeds Reclamation's public protection guidelines for risk reduction actions. Proposed modifications include construction of a filter and drain system along the entire length of the dam.

Pick-Sloan Missouri Basin Project, Riverton Division, Bull Lake Dam, Wyoming

The dam safety issues at Bull Lake Dam include internal erosion of the spillway foundation as well as potential failure of the spillway piers, gate structures, and chute due to alkali-silica reaction in the structural concrete. The risk assessment indicates the dam safety risks associated with these potential failure modes exceeds Reclamation's public protection guidelines for risk reduction actions. Additionally, analyses indicate risks are increasing with time, due to continued erosion of the foundation of the spillway chute and concrete deterioration from alkali-silica reaction. Proposed modifications include partial removal and abandonment of the existing spillway and construction of a new spillway with appropriate defensive measures to resist internal erosion of the spillway foundation.

Rogue River Basin Project, Hyatt Dam, Oregon

The dam safety issues at Hyatt Dam are associated with internal erosion potential failure modes from seepage through the left abutment and downstream embankment area. The risk assessment indicates the dam safety risks associated with these potential failure modes exceeds Reclamation's public protection guidelines for risk reduction actions. Proposed modifications include construction of a filter and drainage trench with a berm on the downstream portion of the dam.

Planned FY 2016 Corrective Action Construction starts:

W. C. Austin Project, Altus Dam, Oklahoma

The dam safety issues at Altus Dam include internal erosion potential failure modes at Lugert Dike and East Dike as well as hydrologic overtopping failure modes for the dam and dikes. The risk assessment indicates the dam safety risks associated with these potential failure modes at the structures exceed Reclamation public protection guidelines for risk reduction actions. Proposed modifications include construction of filters and drains for Lugert and East Dikes to address the internal erosion failure modes as well as raising all dikes to reduce the probability of overtopping and failure during large flood events.

Umatilla Basin Project, McKay Dam, Oregon

The dam safety issue at McKay Dam is related to static internal erosion potential failure modes associated with the toe drain system. The risk assessment indicates the dam safety risks associated with this potential failure mode exceed Reclamation's public protection guidelines for risk reduction actions. Proposed modifications include excavation and replacement of a damaged section of the toe drain and filter envelope.

Milk River Project, Nelson Dikes, Montana

The dam safety issues at Nelson Dikes include internal erosion along the outlet works, through the embankments, and through the foundations of Nelson Dikes C and DA. The risk assessment indicates the risks associated with these potential failure modes exceed Reclamation's public protection guidelines for risk reduction actions. Proposed modifications include removal of the downstream portions of each outlet works, construction of filter diaphragms around the conduits, reconstruction of the downstream portions of the conduits, and construction of downstream filters and drains on Dike C and approximately 1,000 feet of Dike DA.

Washoe Project, Stampede Dam, California

The dam safety issue at Stampede Dam is the potential overtopping of the dam during hydrologic events. The risk assessment indicates the dam safety risks associated with the hydrologic potential failure modes exceed current Reclamation public protection guidelines for risk reduction actions. Proposed modifications include a stabilized earth crest raise and reservoir dikes raising spillway controls structure walls to increase protection from overtopping.

Dams with Preconstruction Activities planned for FY 2017:

B.F. Sisk Dam, Central Valley Project, CA El Vado Dam, Middle Rio Grande Project, NM Howard Prairie Dam, Rogue River Basin Project, OR Hyrum Dam, Hyrum Project, UT Scoggins Dam, Tualatin Project, OR Steinaker Dam, Central Utah Project, UT

It is anticipated the following dams will have decisions regarding the need for potential risk reduction activities made in FY 2016 or FY 2017:

Conconully Dam, Okanogan Project, OR Fresno Dam, Milk River Project, MT Granby Dam, Colorado-Big Thompson Project, CO Ochoco Dam, Crooked River Project, OR

ISCA funding is needed for developing corrective action alternatives, designs, modification reports and associated project approval activities, special studies, data collection, other preconstruction activities, design, construction and construction support activities. When deemed effective, reservoir restrictions or other interim actions are implemented to help manage risks until modifications can be implemented. Generally, interim actions do not reduce the public's risk to the same level as a long-term corrective action. Reservoir restrictions will have economic impacts on water users and reduce recreation, fish and wildlife, and other benefits of the projects.

Funding for the **Department of the Interior Dam Safety Program** allows Reclamation to continue to coordinate and manage the program as the lead technical agency within DOI. Part 753 of the Department Manual and Secretarial Order No. 3048 assigns responsibility to the Commissioner of Reclamation to advise and review other departmental agencies in carrying out the "Federal Guidelines for Dam Safety" as directed by the October 4, 1979, Presidential memorandum. Consistent with the 1997 dam safety peer review team recommendations, the request includes technology development efforts focused on reducing uncertainties associated with dam performance and remote loading conditions to improve risk analysis practices. Development of a dam safety training program in cooperation with other Federal, and state agencies, and the Association of State Dam Safety Officials will continue.

Reclamation continues to take the lead in the Department of the Interior Enterprise Architecture - Reduce Dam Safety Risk (RDSR) Project. RDSR is a 5-phase project to reduce the risks at the dams for which DOI is responsible. RDSR's second goal is to improve the efficiency of the dam safety programs of the Bureau of Indian Affairs, Bureau of Land Management, Bureau of Reclamation, U.S. Fish and Wildlife Service, National Park Service, and Office of Surface Mining. Reclamation provides a RDSR project manager and team leaders for most of the subproject teams. Phases 1 through 3 are complete and resulted in improvements in Department-wide dam safety practices, including a standardized process for Comprehensive Review of dams and suggested revisions to Departmental Manual, Part 753. It has also fostered collaboration among dam safety professionals in the 6 participating agencies. Phases 4 and 5 will be initiated in FY 2016 and FY 2017, focusing on further improvements in the areas of emergency action planning, information sharing, and training and on leveraging technology to facilitate safety of dams processes. The Dam Safety Officer will continue to perform independent oversight, review, and policy development activities.

AUTHORIZATION: The Dam Safety Program is performed as directed by an October 4, 1979, Presidential memorandum to implement the "Federal Guidelines for Dam Safety." Corrective actions and associated studies on Reclamation dams and related facilities are authorized by P.L. 95-578, The Reclamation Safety of Dams Act, November 2, 1978, as amended by P.L. 98-404, Reclamation Safety of Dams Act Amendments of 1984, August 28, 1984. Additional authority is provided in P.L. 106-377, dated October 27, 2000, which incorporated H.R. 4733 (later, H.R. 5483); P.L. 107-117, the FY 2002 Defense Appropriations Act, dated January 25, 2002; in P.L. 108-439, Reclamation Safety of Dams Act Amendments of 2004, December 3, 2004; and P.L.114-113, the Consolidated Appropriations Act, dated December 18, 2015. The Contributed Funds Act (43 U.S.C. 397a), Sundry Civil Appropriations Act for 1922, March 4, 1921 (41 Stat 1367), provides for non-Federal funding.

APPROPRIATION CEILING: The 1978 Safety of Dams Act authorized \$100 million to undertake necessary actions to provide for the safety of existing Reclamation dams and related facilities. All work done under the original Act is non-reimbursable. The Safety of Dams Act was amended in 1984 by authorizing \$650 million more for dam safety purposes (by law the additional funds are indexed for inflation) and requiring a 15 percent repayment provision for future work performed under the Act. An additional \$95 million of appropriations ceiling was authorized in P.L. 106-377, the FY 2001 Energy and Water Development Appropriations Act. An additional \$32 million of appropriations ceiling was authorized in P.L. 107-117, the FY 2002 Defense Appropriations Act. An additional \$540 million of appropriations ceiling was authorized in P.L. 108-439, Reclamation Safety of Dams Act Amendments of 2004. This amendment also increased the Commissioner's authority from \$750,000 to \$1.25 million. An additional \$1.1 billion of appropriations ceiling was authorized in P.L. 114-113, the Consolidated Appropriations Act, 2016.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of Water Infrastructure in Good Condition as Measured by the Facility

Reliability Rating

COMPLETION DATA: This is an ongoing program.

SUMMARIZED FINANCIAL DATA

Program Financial Data

		FY 2017
	FY 2016	Budget
Activity	Enacted	Request
Facility Maintenance and Rehabilitation		
Department of the Interior Dam Safety Program	\$1,300,000	\$1,300,000
Safety Evaluation of Existing Dams	20,284,000	20,284,000
Initiate Safety of Dams Corrective Actions	66,500,000	64,500,000
Request	\$88,084,000	\$86,084,000
Non-Federal	0	0
Prior Year Funds	37,125,587	0
Total Program	\$125,209,587	\$86,084,000
Prior Year Funds/Non-Federal	(37,125,587)	0
Total Reclamation Allotment	\$88,084,000	\$86,084,000

Safety of Dams Modifications Proposed for FY 2016 and FY 2017 Funding for projects subject to final approval and appropriation.					
Activity	FY 2016 Enacted	FY 2017 Budget Request			
Facility Maintenance and Rehabilitation					
MP – CVP, Folsom Unit, Folsom Dam, CA	5,000,000	9,400,000			
GP – P-SMBP, Glendo Dam, WY /North Platte Project, Guernsey Dam, WY	1,000,000	0			
GP – W.C Austin Project, Altus Dam, OK	17,400,000	400,000			
PN - Umatilla Basin Project, McKay Dam, OR	500,000	0			
GP – Milk River Project, Nelson Dikes, MT	5,000,000	800,000			
MP – Washoe Project, Stampede Dam, CA	25,000,000	2,300,000			
MP – Truckee Storage Project, Boca Dam, CA	2,000,000	16,500,000			
GP – Mirage Flats Project, Box Butte Dam, NE	800,000	6,000,000			
GP – P-SMBP, Riverton Division, Bull Lake Dam, WY	1,000,000	14,500,000			
PN – Rogue River Basin Project, Hyatt Dam, OR	1,000,000	3,000,000			
Ongoing Preconstruction Activities					
MP – CVP, B.F. Sisk Dam, CA	3,000,000	1,000,000			
UC – Middle Rio Grande Project, El Vado Dam, NM	700,000	1,000,000			
PN – Rogue River Basin Project, Howard Prairie Dam, OR	500,000	2,000,000			
UC – Hyrum Project, Hyrum Dam, UT	1,000,000	2,000,000			
PN – Tualatin Project, Scoggins Dam, OR	1,000,000	2,000,000			
UC - Central Utah Project, Steinaker Dam, UT	1,000,000	2,000,000			
Other Construction and Preconstruction Dams	600,000	1,600,000			
Total for Safety of Dams Modifications Currently Underway	66,500,000	64,500,000			

CENTRAL VALLEY PROJECT, FOLSOM UNIT, FOLSOM DAM, CALIFORNIA

The dam safety modifications to reduce the risk to the downstream public at the Folsom Facility include construction of an auxiliary spillway, construction of filters, berms and toe drains at Dikes 1, 4, 5, and 6, construction of crest filters at Left Wing Dam and Right Wing Dam, foundation remediation (secant pile reinforced concrete filled key) and stability berm construction at Mormon Island Auxiliary Dike, and gate and pier reinforcement at the concrete dam.

The project began in 2004 and construction will be substantially complete by 2017. Post 2017 work includes site restoration and environmental compliance commitments. The total authorized project cost for the Folsom Dam Safety of Dams Modification is \$520 million. Based upon actual costs to date and estimated costs through completion of the project, the current total estimated project cost is approximately \$336 million and is in the process of being rebaselined.

WORK PROPOSED FOR FY 2017:

Facilities Maintenance and Rehabilitation - Continues dam safety risk management and risk reduction activities throughout Reclamation's inventory of high- and significant-hazard dams. Continues ongoing Safety of Dams modification activities at Altus Dam, OK; Folsom Dam, CA; Nelson Dikes, MT; and Stampede Dam, CA. SOD modification activities will start in FY 2017 for Boca Dam, CA; Box Butte

Dam, NE; Bull Lake Dam, WY; and Hyatt Dam, OR. Preconstruction and project formulation activities are planned on additional dams. The Safety of Dams Evaluation and Modification Program identifies and evaluates Safety of Dams issues at Reclamation dams and implements modifications to reduce associated risks to the public when warranted. Funding levels for risk reduction actions are workload driven based on scope and needs of specific issues. The request enables Reclamation to continue Safety of Dams risk reduction activities and to continue Corrective Action Studies and Modification Reports at dams where risk reduction actions are justified.

Continues with representation of DOI on the Interagency Committee on Dam Safety and continues managing the DOI Dam Safety Programs which includes facilitation and guidance to other departmental Bureaus for their Dam Safety Programs. The request also provides funding for the independent oversight, review, and policy development activities of the Dam Safety Officer.

Reclamation Request

\$86,084,000

Emergency Planning and Disaster Response Program

LOCATION: The 17 Western States in Reclamation's service area.

DESCRIPTION/JUSTIFICATION: Reclamation's ability to plan and respond to emergencies at Reclamation dams, facilities, and offices, and for major disasters such as Hurricane Katrina, is critical to protecting lives, property, and the environment. It is also critical that Reclamation prepare for disruptions to our ability to carry out our day-to-day operations regardless of the type of incident. The Emergency Planning and Disaster Response Program (EPDRP) provides Reclamation-wide support, guidance, and oversight of emergency planning and management activities including emergency action plans, Emergency Notification System, Continuity of Operations, and emergency management training. EPDRP coordinates Reclamation's efforts in continually tracking and updating these programs in response to new or revised regulations, requirements, and initiatives. EPDRP also tracks recommendations for improving Emergency Action Plans and Continuity of Operations plans. EPDRP regularly interfaces with the Department of the Interior on emergency management, disaster recovery, emergency notification, and other activities.

The following are the activities performed under this program:

1) Continuity of Operations: Continuity of Operations deals with how Reclamation continues to carry out Mission Essential Functions and Essential Support Activities, and return to normal business operations when there is a building fire, a natural or terrorist event, inclement weather, or any other event or incident that directly or indirectly impacts Reclamation office/facility operations. The EPDRP provides guidance and support for Continuity of Operations activities at Reclamation offices in Denver, Washington, D.C., and Reclamation's service area in the 17 western states. The EPDRP is responsible for the development and revision of policies and guidance for Continuity of Operations activities at Reclamation's dams and facilities. The EPDRP also has oversight responsibility to ensure that Continuity of Operations programs meet minimum requirements of applicable directives, standards, and policy.

Reclamation is designated as the lead agency to manage the Department's Continuity of Operations devolution program. Devolution program activities include periodic meetings with the Senior Executives with delegated authority of the Acting Secretary of the Department and representatives of the Department's bureaus and offices. Other activities include devolution planning, preparation for annual national level Continuity of Operations exercises, maintaining and updating contact information of the Devolution Team members in the automated mass notification system, and participation on the Department's Exercise Planning Team for the national level exercises.

2) Emergency Planning for Dams: The EPDRP is responsible for the development and revision of policies and guidance pertaining to planning for incidents at Reclamation's dams. Reclamation's emergency planning efforts primarily consist of developing and maintaining current Emergency Action Plans for dams. These plans are reviewed annually and periodically exercised at Reclamation's high and significant risk dams. The EPDRP also has oversight responsibility to ensure programs under the Emergency Action Plan Program meet minimum requirements of applicable directives, standards, and policies.

3) Training and Exercises: The EPDRP provides training related to Continuity of Operations, Emergency Action Plans, and incident management systems (e.g., National Incident Management System and Incident Command System) to both Reclamation and other agency and bureau employees. The training is provided to Reclamation staff to increase awareness and preparedness capabilities for Continuity of Operations and Emergency Action Plans.

EPDRP staff participates in the design and implementation of exercises at dams and facilities. Security exercises are required at National Critical Infrastructure dams (e.g., Hoover Dam) and the EPDRP provides technical and logistical resources to meet this requirement. In addition, the EPDRP also has oversight responsibility to ensure that Emergency Action Plans and Continuity of Operations plans are exercised in accordance with existing directives, standards, and policies.

- 4) Communications: The EPDRP's communication program operates with both secure and non-secure communications. The secure communications support Reclamation's Continuity of Operations Plan, law enforcement, security, and safety programs. The EPDRP also operates Reclamation's Emergency Operations Center, which provides both secure and non-secure methods of communication and coordination for senior management, leadership, and to meet communications requirements for Continuity of Operations. The Emergency Notification System program provides prompt and timely notification of incidents at or on Reclamation facilities, lands, and water bodies on a 24/7 basis.
- 5) Disaster Response and Recovery: The Disaster Response and Recovery program provides management and administration of Reclamation and Departmental personnel in support of the Federal Emergency Management Agency (FEMA) and U. S. Army of Corps of Engineers (USACE). Reclamation is a designated "executive agent" in support of the Department's activation in the National Response Framework. Reclamation has supported 43 FEMA and USACE disaster operations since 1993. EPDRP also prepares Reclamation staff to respond to disasters at Reclamation facilities.

In accordance with Department Manual 900, Chapter 1, Section 1.10, upon the request of local government authorities, Department agencies can provide immediate emergency response to protect human life, property, or the environment if the response would be impaired by the delay required to seek approval of senior officials. The response will be provided on a cost-reimbursable basis whenever possible. However, such response will not be delayed or denied because of the inability of the local government authority to make a commitment to reimburse the Department or Reclamation for such response.

AUTHORIZATION: National Security Act of 1947, P.L. 93-288, as amended by P.L. 100-707; Robert T. Stafford Disaster Relief and Emergency Assistance Act; P.L. 84-99, Flood Control and Coastal Emergencies; Department of the Interior, Department Manual, Series: Emergency Management, Part 900, Emergency Management Program: Chapter 1: Policy, Functions, and Responsibilities, Chapter 2: Continuity of Operations Program, Chapter 3: National Security Emergency Preparedness, Chapter 4: Coordination of Emergency Incidents, and Chapter 5: National Response Plan (NRP) Coordination. Department of the Interior, Department Manual, Series: Special Programs, Part 753, Dam Safety and Security Program: Chapter 2: Program Requirements.

COMPLETION DATA: This is an ongoing program.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 Budget Request
Facility Operations		
Disaster Response, Emergency Notification Systems, and Emergency Planning at Dams	\$760,000	\$760,000
Continuity of Operations Program	490,000	490,000
Request	\$1,250,000	\$1,250,000
Non-Federal	0	0
Prior Year Funds	102,916	0
Total Program	\$1,352,916	\$1,250,000
Prior Year Funds/Non-Federal	(102,916)	0
Total Reclamation Allotment	\$1,250,000	\$1,250,000

WORK PROPOSED FOR FY 2017:

Facility Operation - Continues oversight of the Continuity of Operations and Emergency Action Program activities and the ongoing exercises of existing Continuity of Operations and Emergency Action Plans. Continues managing disaster response mission assignments, National Response Framework requirements, secure communications and related activities, and the Emergency Notification System. Reclamation continues to participate in the National Critical Infrastructure Exercise program and to comply with Departmental minimum training requirements for emergency management. The Department devolution site will participate in the annual national Continuity of Operations exercise.

Reclamation Request

\$1,250,000

Environmental Program Administration

LOCATION: The 17 Western States in Reclamation's Service Area

DESCRIPTION/JUSTIFICATION: The program provides for the review, assessment, evaluation, study, and formulation of plans to ensure compliance with environmental law, policy, and initiatives. It also provides for the collection and analysis of data to determine legal positions and recommendations relative to the conservation and protection of endangered or threatened species in compliance with the Endangered Species Act (ESA), and for meeting requirements of the National Environmental Policy Act (NEPA).

AUTHORIZATION: P.L. 91-190, National Environmental Policy Act of 1969, January 1, 1970; P.L. 92-500, Clean Water Act, October 18, 1972; P.L. 93-205, Endangered Species Act of 1973, December 28, 1973; P.L. 93-523, Safe Drinking Water Act of 1974, October 31, 1974; and Executive Order 11990, Wetlands Protection, May 24, 1977.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Fish and Wildlife Management and Development	\$1,720,000	\$1,828,000
Enacted/Request	\$1,720,000	\$1,828,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$1,720,000	\$1,828,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$1,720,000	\$1,828,000

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development - Continues work towards conserving, enhancing, and restoring fish and wildlife population and habitat with emphasis on native and threatened and endangered species recovery and restoration. Continues administrative support, oversight, and management of ESA and NEPA processes and reviews. This includes the review, coordination, and comment on NEPA and other environmental documents prepared by other Federal, State, or local agencies. Continues administrative support in preparing and coordinating the annual Interagency Agreement with U.S. Fish and Wildlife Service under the Fish and Wildlife Coordination Act. Continues to establish baseline data and monitoring commitments in support of local resource initiatives and activities.

Reclamation Request \$1,828,000

SEE APPENDIX FOR: Obligations by Function for Operating Project

Examination of Existing Structures

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: This program provides for on-site review and examination of Reclamation project facilities operated by both Reclamation and other operating entities, identification of operation and maintenance deficiencies, and provides technical assistance to the operating entities. The program recommends corrective actions to improve safety and operational procedures, reduce operating expenses, and conserve water and energy where applicable. In addition, the program provides for the review, evaluation, and revision of Standing Operating Procedures (SOPs), and the review and evaluation of mechanical equipment and critical lifeline structures at Reclamation facilities operated by both Reclamation and other operating entities. The program compels safe and proper operation of facilities, thus reducing in-service failures and excessive maintenance, and protects the Federal investment.

The program also provides for procedures to implement and exercise Emergency Action Plans (EAP) for Reclamation high or significant hazard dams that are operated by both Reclamation and other operating entities. These EAPs provide timely and accurate notification to local authorities responsible for evacuating the civilian population potentially at risk from high operational, or dam failure, releases. Additionally, the program provides for emergency management coordination activities with other Federal, State, and local jurisdictions to ensure coordinated emergency preparedness and response to national and/or local incidents affecting Reclamation facilities. The program also monitors and works to prevent or control invasive species activities and impacts to Reclamation facilities.

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902; P.L. 260, the Reclamation Project Act of 1939, August 4, 1939; E.O. 13423, Strengthening Federal Environmental, Energy, and Transportation Management, January 24, 2007; E.O. 13514 Federal Leadership in Environmental, Energy, and Economic Performance, October 5, 2009.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Facility Operations	\$3,116,000	\$3,145,000
Facility Maintenance and Rehabilitation	5,693,000	5,709,000
Request	\$8,809,000	\$8,854,000
Non-Federal	0	0
Prior Year Funds	142,183	0
Total Program	\$8,809,000	\$8,854,000
Prior Year Funds/Non-Federal/Other Federal	(142,183)	0
Total Reclamation Allotment	\$8,809,000	\$8,854,000

WORK PROPOSED FOR FY 2017:

Facility Operations – Continues funding for cyclical revisions to EAP reviews and evaluations of SOPs for safety and consistency, identifying deficiencies, and recommending corrective action. Continues promoting efficient and safe operations of transferred Reclamation facilities, periodic emergency exercises and reviews, technical assistance, classroom training, and on-site training for dam operators. Continues preparation and review of reports in accordance with Reclamation's performance parameters. Continues funding the development of updated inundation studies and associated maps for the Region's high or significant hazard dams. Continues funding for development of response plans, monitoring activities, and facility vulnerability assessments for invasive Quagga and Zebra Mussels, which have the potential to significantly impact Reclamation facilities and their operations.

\$3,145,000

Facility Maintenance and Rehabilitation – Continues funding for periodic examinations of Reclamation water storage, conveyance, and distribution facilities and related equipment operated by other entities, including landslide surveillance, in accordance with acceptable industry practices; identifying and monitoring maintenance and dam safety related deficiencies; reviews of instrumentation data; and maintenance, including replacement of instrumentation and installations to protect water and related resources. Continues periodic examination of fish passage and protective facilities, identification of deficiencies, examining and monitoring of Canals in Urbanized Areas, maintaining the regional bridge inventory and conducting periodic structure examinations in accordance with the National Bridge Inspection Standards. Continues funding for the Environmental Management System, per Executive Orders 13423 and 13514, which evaluates an organization's apparent or potential impact to the environment or human health.

5,709,000

Reclamation Request

\$8,854,000

General Planning Activities

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: Water resource agency challenges today are impacted by population growth, climate variability, accelerated urbanization of rural areas, inefficient water system operations, and environmental constraints. General Planning Activities (GPA) funds support the success of ongoing water resource management activities and new initiatives to address these challenges. Funds are used to apply planning techniques and technical expertise to help understand and deal with water supply and demand issues; build and sustain partnerships with local, State, and Tribal entities; and develop policies, guidelines, training, and analytical tools. GPA funds maintain core water resources planning capabilities through resource investigation activities, including preliminary examinations of economic and technical solutions to water supply challenges, advanced scoping of studies approved for future-year funding, short-term unanticipated investigation activities not funded by other investigation programs and participation on interagency study teams. GPA funds are also used to resolve Reclamation policy questions and to develop guidelines for the application of legal and policy requirements.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating.

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$2,000,000	\$2,000,000
Enacted/Request	\$2,000,000	\$2,000,000
Non-Federal	0	0
Prior Year Funds	45,107	0
Total Program	\$2,045,107	\$2,000,000
Prior Year Funds/Non-Federal	(45,107)	(0)
Total Reclamation Allotment	\$2,000,000	\$2,000,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues to foster and sustain Reclamation's ability to use its water resources planning and technical expertise to address existing and emerging challenges associated with competing water uses and the need to balance multiple demands for limited water supplies. This important support function helps sustain Reclamation's core competencies and capabilities through structured and timely water resources planning techniques.

Continues to establish, maintain, and promote partnerships with local, State and Tribal entities.

Continues to promote and enable facilitation of non-Federal investment. Identifies and develops alternatives to optimize existing single-use water supplies to meet emerging multiple-use demands. Continues to provide Reclamation customers and stakeholders with long-term value-added solutions to ever mounting water resources challenges.

Continues the review of data and reports from others that might affect Reclamation interests. Continues to participate in multi-agency activities to solve resource problems of mutual interest, develop analytical tools and training materials relevant to investigation activities, resolve general investigation guideline issues, conduct critical short-term (less than one year) investigation activities and provides technical assistance to States and Tribes not funded by other programs.

Continues to coordinate Reclamation water supply management and water quality activities with ongoing programs and initiatives of Federal, State, and local agencies, and Tribes. Participates in partnership activities and responding to unanticipated work related to fish, wildlife, and environmental activities, including coordination and mutual program development.

Continues preparation of regional status reports, budget documents, and program administration and advance scoping of potential activities. Continues to respond to administrative, congressional, and public inquiries regarding planning activities. Provides staff training in investigation processes. Continues assistance in completing special studies, formulating new studies, and providing short-term technical assistance to partners in areas not covered by other investigation programs. Supports Bureauwide strategic planning activities.

Continues coordination, completion of special studies, formulation of new studies, preparation of plans of study, and completion of ongoing studies that are short-term (usually less than one year) in areas not covered by other investigation programs; Reclamation-wide tasks; and strategic planning activities at the Regional Office

Reclamation Request

\$2,000,000

Land Resources Management Program

LOCATION: The 17 Western States in Reclamation's Service Area

DESCRIPTION/JUSTIFICATION: The program provides for land management and resources activities on land managed by Reclamation. This work includes serving as liaison with cooperating land management entities and other administrative activities to ensure that soil and hazardous waste management, pest and invasive species management, cultural resources management and compliance activities, paleontological permitting and resource management activities, fire management plans, and other related contractual arrangements are properly administered. This program provides for resource management planning studies which are used to determine future management and utilization of the lands within Reclamation's jurisdiction.

In addition, this program provides direct operation, maintenance, and replacement activities required to protect resources on land where it has not been possible to secure management by an administering agency and helps meet requirements of the Americans with Disabilities Act (ADA), the Architectural Barriers Act, and Section 504 of the Rehabilitation Act. The program includes contracts for boundary surveys and fencing, aerial photography, geographic information system activities, and office support services. The GIS program includes the regional GIS group which provides geospatial technical support, services, and products for Reclamation programs, projects, and partners.

The cultural resource activities are in support of the National Historic Preservation Act Section 106, which mandates compliance to assess impacts of Federal undertakings on cultural resources, determining eligibility of properties for inclusion as historic properties, completing the identification of Native American Graves Protection and Repatriation Act (NAGPRA) items in Reclamation collections, and repatriation of burial items to the appropriate affiliated Tribes, as well as the disposition of NAGPRA items newly discovered on Reclamation lands. The program includes completing actions to preserve Reclamation's museum property.

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902; the Antiquities Act of 1906, June 8, 1904; P.L. 76-260, the Reclamation Project Act of 1939, August 4, 1939; P.L. 89-665, the National Historic Preservation Act of 1966 (NHPA), October 15, 1966; P.L. 90-480, Architectural Barriers Act of 1968, August 12, 1968; P.L. 91-512, Resource Recovery Act (RRA), October 26, 1970; P.L. 93-14, Solid Waste Disposal Act-Extension, April 9, 1973; P.L. 93-291, P.L. 93-112, Section 504 of the Rehabilitation Act of 1973, as amended September 26, 1973; Archeological and Historic Preservation Act of 1974, May 24, 1974; P.L. 94-580, Resources Conservation and Recovery Act of 1976, October 21, 1976; P.L. 95-341, American Indian Religious Freedom Act of 1978, August 11, 1978; P.L. 96-95, Archeological Resources Protection Act of 1979, October 31, 1979; P.L. 96-510, Comprehensive Environmental Response, Compensation and Liability Act of 1980, December 11, 1980; P.L. 99-499, Superfund and Reauthorization Act of 1986 (SARA), October 17, 1986; P.L. 101-508, Toxic Substance Control Act, November 5, 1990; P.L. 101-601, Native American Graves Protection and Repatriation Act, November 16, 1990; P.L. 104-170, The Federal Insecticide, Fungicide and Rodenticide, as amended; August 3, 1996; P.L. 111-11, Paleontological Resources Preservation Act of 2009, March 30, 2009; Executive Order 12906, April 11, 1994; Executive Order 13112 Invasive Species, February 3, 1999; Executive Order 13423 Strengthening Federal Environmental, Energy, and Transportation Management, January 26, 2007.

COMPLETION DATA: This is an ongoing program.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

Mission Area: Celebrating and Enhancing America's Great Outdoors.

Goal: Protect America's Cultural and Heritage Resources.

Performance Measures Percent of collections in DOI inventory in good condition

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Land Management and Development	\$9,188,000	\$9,813,000
Enacted/Request	\$9,188,000	\$9,813,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$9,188,000	\$9,813,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$9,188,000	\$9,813,000

WORK PROPOSED FOR FY 2017:

Land Management and Development - Continues to facilitate Reclamation's overall compliance with applicable Federal laws, regulations, Executive Orders (E.O.), Department of the Interior (Department) policies, and Reclamation policies, directives and standards, and guidelines: specifically, pest management program administration and implementation of Reclamation's Integrated Pest Management Manual; and Presidential E.O. 13112 on Invasive Species; hazardous management program, which offers technical assistance on how to comply with the Comprehensive Environmental Response Compensation and Liability Act, the Resource Conservation Recovery Act, and the Toxic Substances Control Act; and fire management plans, which comply with the Secretary's 2001 Federal Fire Policy.

<u>The Department's Centralized and Direct Billing Activities</u>: Funding in FY 2017 continues to fund support and common services provided by the Department which are assessed through the Department's Working Capital Fund (Centralized) and Direct Billing. Such common service costs include:

<u>Asbestos-Related Cleanup Cost Liabilities</u> - The primary purpose of this program is to account for the cost of asbestos-related cleanup and disposal costs as an environmental liability. \$841

<u>FedCenter</u> - The program funds the Department's share of support costs from the Federal Facilities Environmental Stewardship and Compliance Assistance Center (FedCenter). 1,920

Invasive Species Council/Coordinator - The National Invasive Species Council (NISC) provides coordination and leadership for invasive species program and activities throughout the Federal Government. Invasive species are non-native or alien species that harm the economy, environment, and in some cases human health. E.O. 13112, signed in 1999, established the Council and designated the Secretaries of the Interior, Agriculture, and Commerce as co-chairs. Other members include the Departments of Transportation, Defense, Health and Human Services, State, Homeland Security, and

Treasury; as well as the Environmental Protection Agency (EPA), U.S. Trade Representative, and U.S. Agency for International Development. The E.O. directs the Secretary of the Interior to provide staffing and support of the NISC and the Invasive Species Advisory Committee (ISAC), a group of diverse, non-Federal experts and stakeholders, tasked with providing outside input and advice to the Council. The Department's Coordinator is part of the Invasive Species Council that coordinates the Invasive Species Program among the various bureaus and program offices of the Department. The Department billing methodology is based on the size of the bureau's invasive species programs.

E-Gov Travel - E-Gov Travel is a government-wide, web-based, end-to-end travel system/service, and is one of five General Services Administration- managed (GSA) E-Gov initiatives in the President's Management Agenda. This program will replace more than 250 different travel booking, authorization, and financial systems across the Federal government. It will also align all GSA travel programs, including air, lodging and policy into an integrated platform of shared services to better serve travelers. The Department's billing methodology is based on the number of travel vouchers processed per bureau.

97,384

Emergency Preparedness (COOP) – This activity manages interagency Continuity of Operations requirements, Interior's activities related to Continuity of Government, the Department's Continuity of Operations Plan, readiness of alternate operating sites, and training and exercises to ensure the Department can execute its mission-essential functions during emergency conditions.

70,328

<u>Emergency Response</u> – This activity manages planning and preparedness of the Department to respond to a broad range of emergency incidents, from natural disasters to terrorist events. It coordinates Departmental activities related to Homeland Security directives, manages Interior's implementation of the National Incident Management System, and coordinates the Department's Emergency Management Council and Regional Interior Emergency Coordination Councils.

Renewable Energy Certificates - The purchase of renewable energy certificates is necessary to ensure compliance with the Energy Policy Act of 2005, which stipulates that an increasing percentage of electric energy purchases by the Federal government must be from renewable energy sources.

<u>Accountability Team</u> - This program will perform accountability reviews of Human Resource programs and initiatives throughout the Department.

49,206

<u>Equal Employment Opportunity (EEO) Complaints Tracking System</u> - This activity supports the automated complaints tracking system, which provides a reliable process to monitor EEO complaint activity and trends.

4,307

<u>Victim Witness</u> -The Victim Witness Program Coordinator provides Department law enforcement officers with training on the rights and needs of crime victims to enhance officers' ability to assist victims of Federal crime. The coordinator provides leadership to bureau staff in changing attitudes, policies, and practices to promote justice and healing for victims. The coordinator also develops practices, training, and technical assistance for implementing victim's rights, thus improving the skills of law enforcement officers working with victims.

<u>Federal Relay Service</u> - This funding covers Reclamation's share of the Department's cost for the Federal Relay Service, which provides federal employees who are deaf, hard-of-hearing, blind, or have speech disabilities equal communication access.

18,652

<u>Threat Management</u> - This project is driven by the need to detect potential network threats. A tool will be implemented to determine the source and content of data being accessed by external sources.

376,649

Electronic Records Management (ERM) (Direct and Centralized) - The ERM develops policies, procedures, and requirements for the development of an ERM System for the Department. The Department has established records management systems for retaining and retiring paper records but does not have an electronic system to assist employees in the day-to-day creation, management, and disposition of electronic records. This requires e-mail and other electronic documents that are records to be printed to paper and filed in an approved record keeping system. The purpose of this project is to provide the Department with an enterprise-wide, centralized approach to ERM. An ERM system will provide the following benefits to the Department and its bureaus: mechanisms for managing agency records through their life-cycle, as required by law; enterprise-wide systems or cross-agency collaboration to reduce the cost associated with operating multiple, disparate records management systems, including administration, maintenance, training, etc.; a central system to provide the ability to read records beyond the life of the system that created them, thus alleviating the need to maintain outdated software; and providing a central access point to active and inactive records of an agency. The Department billing methodology is based on the size of the bureau's Information Technology (IT) budgets (the methodology is under review). 390,736

Immediate Office of the Secretary (IOS) Telecom Collaboration - This program is responsible for centrally hosting IT systems that are utilized by the Department's Office of the Chief Information Officer (OCIO).

78,386

Radio Project Management Office – This program oversees and manages radio assets and systems across the Department. 64,918

<u>IT Asset Management</u> - This program utilizes a set of IT processes and tools that are integrated with other strategic systems, such as financial management, network and systems management, etc.

56.083

<u>IT Transformation</u> – Funding will support IT Transformation project-level planning and coordination and the implementation of enterprise IT services. Allocations of these costs were developed as a percentage of the rebaselined infrastructure costs for anticipated costs in the Working Capital Fund. This program relates to strategic and project planning estimates for implementation services, data center consolidation, and acquiring hardware and software related to mobile computing.

489,841

Alternative Dispute Resolution (ADR) Training - This program will support the increased use of alternative dispute resolution processes and conflict management practices. The program will train attorneys, supervisors, and ADR neutrals to improve their conflict management and negotiation skills and use ADR to lower litigation costs.

3,712

Imagery for the Nation (IFTN) - In conjunction with continued Department funding support to cover Federal public lands, the U.S. Department Agriculture's (USDA) National Agriculture Imagery Program (NAIP) within the Farm Service Agency (FSA) has determined that it can increase the frequency of one-meter imagery acquisition and update from five to three years. The Department is the manager of Federal public lands and therefore is a natural partner for FSA in coordinating a unified approach to the acquisition of national imagery. The one-meter imagery will be acquired through FSA's contract with the private sector. FSA will inspect the imagery for quality assurance, deliver a copy of the imagery to each contributing partner, and provide the data to the USGS where it can be archived and made available to the public. The Department's bureaus already secure similar data on an ad hoc, decentralized basis and view the coordinated approach of the NAIP partnership as a distinct improvement that will lead to process efficiencies and cost savings. This partnership will ensure a decreased acquisition cycle and establish a more systematic cost-sharing process. Reclamation's water, land, and environmental resources program will also benefit from this consolidated approach.

<u>Indirect Cost Negotiations – DOI Support</u> – This agreement provides for the negotiation and issuance of indirect cost rates for Indian Tribal Governments, Nonprofit Organizations, Insular Area Governments, and/or State and Local Governments on behalf of the U.S. Department of the Interior (DOI) federal cognizant agency for indirect cost rate negations.

87,500

The FY 2017 Budget Estimate for the Departmental Centralized and Direct Billing is an estimate and is subject to change.

Subtotal, Department Centralized Billing and Direct Billing Activities

\$2,255,000

Administration of Section 504 Activities - Continues field inspections and surveys of Reclamation facilities to determine program deficiencies and retrofitting as required by the Architectural Barriers Act and Section 504 of the Rehabilitation Act, Title II of the ADA. Continues development of manual data management protocols in the absence of an automated system.

49,000

Cultural Resource Management - Continues managing cultural resources under Reclamation jurisdiction as mandated by Section 110 of the National Historic Preservation Act (NHPA) of 1966 which includes identifying sites, buildings, and structures for nomination to the National Register of Historic Places; adaptive reuse of historic buildings and structures; historic properties interpretation; updating and maintenance of cultural resource database systems; programs to preserve, protect, and stabilize historic properties; and coordination efforts with the Denver Office on policy development. Provides partial support for historic condition assessments of reserved and transferred works. Activities include administration of contracts for cultural resource inventory, evaluation and salvage, development of cultural resource management plans, protection of cultural resources, review of cultural resource and paleontological permit applications, review of National Environmental Policy Act (NEPA) documents, and Section 110 cultural resources surveys on Reclamation lands that may be potentially affected by changes in reservoir and river elevations, as a result of NHPA consultations for Surplus Criteria and Shortage Guidelines. Continues the identification of Native American Graves Protection and Repatriation Act (NAGPRA) items in the Reclamation collections, consultation with Tribes, and repatriation or disposition of NAGPRA items to appropriate Native American Tribes in accordance with P.L. 101-601. Continues identification, accessioning, cataloging, and preservation of Reclamation museum property collections in accordance with P.L. 96-95 and Departmental Manual Part 411, Managing Museum Property. Continues Heritage Asset Accountability program as required by Executive Order (E.O.) 13287. 1,282,000

<u>Wildland Fire Management</u> - Continues activities for development and implementation of Reclamation-wide fire management plans using data obtained from demonstration projects.

Proposed work includes support of wildland fire planning and suppression; Reclamation representation on intra-Departmental coordinating and reporting groups; implementation of associated agreements that are west-wide in nature; and assistance to regions in their preparation and implementation of fire management plans to ensure compliance with Departmental and Reclamation fire management planning policies.

Continues fire suppression contracts with other entities as appropriate.

410,000

Geographic Information Systems (GIS) and National Spatial Data Infrastructure (NSDI) - Continues GIS and NSDI development and support. Activities include data collection, input and interpretation, and spatial and relational database development use and analysis as required by E.O. 12906 and amended by E.O. 13286. Continues technical support, services and products for Reclamation programs, projects and partners, and regional compliance with Federal, Department, and bureau information technology security requirements.

Hazardous Materials Management - Continues to provide program direction and administration of hazardous waste management activities required by statute and regulations to prevent threats to public health and to provide responsible land resources management. Activities include inventory, monitoring, and cleanup of unauthorized dumpsites and underground storage tanks. Continues program coordination, guidance, technical advice, and assistance to regional and area offices in complying with the Comprehensive Environmental Response, Compensation and Liability Act, Resource Conservation Recovery Act, and Toxic Substances Control Act. Conducts Department-mandated environmental compliance reviews of regional and area office hazardous materials management and waste disposal business practices and operations and provides for the Reclamation-wide implementation of mandated Departmental programs and initiatives. Activities include inventorying, reporting, monitoring, auditing, budgeting, and cleanup of unauthorized dumpsites and the release of unknown hazardous materials; fulfilling requirements of Executive Orders 13423 and 13514 by continuing to implement the Regional Sustainability and Environmental Management System, asbestos liability, and Poly-Chlorinated Biphenyls; development of technical and procedural guidance; program review of hazardous waste disposal; and liaison with cooperating entities to ensure contractual arrangements are adequately administered. 806,000

Invasive Species/Pesticide Management - Continues program direction, technical advice, development of new pest management techniques, assistance in inventorying invasive species, development of integrated pest management (IPM) plans, evaluations of pesticide materials proposed for use, and the drafting and publishing of pest management manuals for field operations and maintenance. Represents Reclamation on Departmental and State committees for invasive species management. Consults and performs cooperative efforts with other Federal, State, and local agencies in preventing the establishment of invasive species enables enabling Reclamation to operate and maintain projects safely and reliably, which ensures reliable delivery of water and power. IPM techniques help ensure Reclamation conserves water and meets requirements related to State water rights, interstate and international compacts, decrees, and contracts.

<u>Land Records Audit</u> - Continues land record research, maintenance of land records, updating of Reclamation's land inventory system and conversion of paper land records into digital format. Funding will be used for the annual recertification of land records and reconciliation of the records to the financial system and additional land issues.

356,000

<u>Land Rights Use</u> - Continues meeting public requests for data regarding Reclamation lands and response on ownership, appraisal, and other land actions. This activity involves preparation and regulation of

leases, licenses, permits, and other land use activities. Provides for required administration and monitoring of all rights of use, agreements, and contracts; as well as a required review of all Reclamation lands every five years. Secures updated appraisals for existing use authorizations. Funding provides resources to more actively pursue partnerships with potential land management partners which involves negotiation, development, and monitoring of new leases, licenses, permits, and other land use agreements, including support of the "America's Great Outdoors" initiative.

233,000

Land Use Management - Continues the administration, management, and oversight of project lands, to include: land acquisition and disposal; land exchanges; rights-of-way activities; reviews of land utilization; maintenance of land records; recreation fee assessments; tort claim investigations; and modeling, protection and restoration of Reclamation controlled lands. Continues response to public, regional, Departmental, and Congressional inquiries related to lands or activities on lands under Reclamation's management jurisdiction; provides consultation for management and the Solicitor relative to land and realty issues; provides program support with land status data, acquisition/disposal guidance; and resolves trespasses not related to a specific project. Maintains staff proficiency in program areas. Continues inspection of public use facilities on Reclamation land to determine contract/program deficiencies and retrofitting to meet legal requirements. Provides resources to facilitate and transfer knowledge and information as a process of succession planning for vacancies due to transfers, reductions in staff, and anticipated vacancies; for realty and land management training for realty staff; and to review, comment, and/or participate with other Federal agencies' Resource Management Plans or land management plans that may impact Reclamation's primary mission. Continues ongoing coordination and implementation of the Title Transfer Program, transferring eligible Reclamation project facilities of nonnational importance that could be efficiently and effectively managed by non-Federal entities. Continues administration and management of the Reclamation Recreation Management Act, Title XXVIII Program. Continues fire suppression contracts with other entities as appropriate. Responds to public requests for use authorizations and surveys to resolve trespass problems and to locate outgrant features and letters of 3,729,000 consent.

Subtotal, Other Land Resources Management Activities

7, 558,000

Total Reclamation Request

\$9,813,000

Miscellaneous Flood Control Operations

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: The program makes flood forecasting possible by funding the collection of rainfall, snowpack, temperature, and streamflow measurements necessary to make decisions on reservoir operations during flood events. The program maintains early warning systems which alert reservoir operators of conditions associated with flooding. The program supports stream-gauging by the U.S. Geological Survey and state water resources departments.

The program also funds improvements to runoff forecasting. Reclamation is improving its ability to forecast runoff by using more data from available sources. Reclamation is collaboratively working with the National Weather Service to develop and implement the Extended Streamflow and Prediction computer model to improve long range forecasts for river basins. Forecasts are coordinated between Reclamation, the Natural Resources Conservation Service, the U. S. Army Corps of Engineers, and the National Weather Service.

AUTHORIZATION: P.L. 74-738, Flood Control Act of 1936, June 22, 1936, as amended; P.L. 78-534, Flood Control Act of 1944, December 22, 1944; and P.L. 99-450, Colorado River Floodway Protection Act, October 8, 1986.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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Activity	FY 2016 Enacted	FY 2017
Activity	Ellacted	President's Budget
Facility Operations	\$817,000	\$819,000
Enacted/Request	\$817,000	\$819,000
Non-Federal	0	0
Prior Year Funds	2,865	0
Total Program	\$819,865	\$819,000
Prior Year Funds/Non Federal/Other Federal	0	0
Total Reclamation Allotment	\$817,000	\$819,000

WORK PROPOSED FOR FY 2017:

Facility Operations – Continues preparation of runoff forecasts for Reclamation projects and improvements to forecasting procedures. Accurate runoff forecasts are necessary to safely evaluate reservoirs for flood control and determine refill schedules that minimize flood risk and enhance water supply. Reclamation is working collaboratively with the National Weather Service to improve long range runoff forecasts for river basins throughout the regions.

This includes developing teleconnections with climatological signals in the North Pacific and the use of ensemble streamflow predictions to show a range of streamflow values along with an associated probability. Forecasts are coordinated among Reclamation, the National Weather Service, the U.S. Army Corps of Engineers, and the Natural Resources Conservation Service.

This activity continues support of flood forecasting by the collection of rainfall, snowpack, temperature, and streamflow measurements necessary to make decisions on reservoir operations during flood events. Continues operation of early warning systems which alert reservoir operators of conditions associated with flooding and supports stream gauging by the USGS and State water resource departments

Participates in the administration of the Arizona statewide flood warning system through involvement with a multi-agency task force.

Reclamation Request

\$819,000

Native American Affairs Program

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: The Native American Affairs Program supports a variety of Reclamation activities with Indian tribes, including technical assistance, the Secretary's Indian Water Rights Settlement Program, and outreach to Tribes.

Technical Assistance - Provides technical and financial assistance to Tribes and tribal organizations to increase opportunities for Tribes to develop manage and protect their water and related resources. Program activities include assisting Tribes to better understand their water related needs and develop water resources on Indian reservations through traditional and innovative technologies.

Negotiation and Implementation of Water Rights Settlements - Provides support for the Secretary's Indian Water Rights Settlement Program in the assessment, negotiations, and implementation phases. Support includes Reclamation representation and leadership on Federal water rights assessment, negotiations, and implementation teams; technical support including data gathering, studies, analyses and reviews, including reviews carried out by Reclamation's Design, Estimating, and Construction (DEC) Office to improve the quality of designs and cost estimates for settlement projects; implementation activities for which Reclamation is responsible and for which funding is not available from other sources; and other support for the Secretary's Indian Water Rights Office.

Program Support and Outreach - Provides for: (1) developing and coordinating guidance for carrying out Reclamation activities in a manner consistent with Federal Indian law and policies in such areas as the Indian trust responsibility, government-to-government consultation, and the Indian Self-Determination and Education Assistance Act; (2) training for Reclamation managers and staff to enable them to work more effectively with Tribes; (3) support for Native American Affairs Program Managers/Liaisons in each of Reclamation's regions; (4) outreach to Tribes, which is carried out through close coordination with the Regions; (5) working with other Federal agencies to develop partnerships to support tribal water resources needs; and (6) coordination, guidance and administration of Reclamation's Native American Affairs Program.

AUTHORIZATION: P.L. 57-161, The Reclamation Act of 1902, June 17, 1902, as amended; P.L. 93-638, The Indian Self-Determination and Education Assistance Act, January 4, 1975, as amended P.L. 100-472, The Indian Self-Determination Amendments of 1987, October 5, 1988; P.L. 103-413, The Indian Self-Governance Act of 1994, October 25, 1994; P.L. 97-293, Southern Arizona Water Rights Settlement Act of 1982, October 12, 1982; as amended P.L. 108-451, the Arizona Water Settlement Act, December 10, 2004, as amended; P.L. 110-148, to Amend the Arizona Water Settlement Act, December 21, 2007; P.L. 100-675, San Luis Rey Indian Water Rights Settlement Act of 1988, November 17, 1988; P.L. 102-575, Title XXXVII, San Carlos Apache Tribe Water Rights Settlement Act of 1992, October 30, 1992; P.L. 105-18, Emergency Supplemental Appropriations for Recovery from Natural Disasters FY 1997, Sec. 5003, June 12, 1997; P.L. 103-434, Yavapai Prescott Indian Tribe Water Rights Settlement Act of 1994, October 31, 1994; P.L. 101-602, Fort Hall Indian Water Rights Act of 1990, November 16, 1990; P.L. 102-374, Northern Cheyenne Indian Reserved Water Rights Settlement Act of 1992, September 30, 1992, as amended; P.L. 102-441, Jicarilla Apache Tribe Water Settlement Act of 1992, October 23, 1992; P.L. 111-11, Title X; Subtitle B, Northwestern New Mexico Rural Water Projects Act, March 30, 2009; P.L. 111-11, Title X; Subtitle C, Shoshone-Paiute Tribes of the Duck Valley Reservation Water Rights Settlement Act, March 30, 2009; P.L. 110-297, Soboba Band of Luiseno Indians Settlement Act, July 31, 2008; 43 USC 373d, Grants and Cooperative Agreements with Indian Tribes and Organizations, February 20, 2003; P.L. 111-291, Claims Resolution Act of 2010: Title III, White Mountain Apache Tribe Water Rights Quantification Act, Title IV, Crow Tribe Water Rights

Settlement Act, Title V, Taos Pueblo Indian Water Rights Settlement Act, Title VI, Aamodt Litigation Settlement Act, December 10, 2010. P.L. 113-223, Bill Williams River Water Rights Settlement Act of 2014. December 16, 2014.

COMPLETION DATA: This is an ongoing program.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of Interior Strategic Plan for FY 2014-2018 as follows:

Mission Areas: Strengthening Tribal Nations and Insular Communities; Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Meet our Trust, Treaty and Other Responsibilities to American Indians and Alaska Natives; Manage Water and Watersheds for the 21st Century

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$10,925,000	\$10,425,000
Request	\$10,925,000	10,425,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$10,925,000	\$10,425,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$10,925,000	\$10,425,000

WORK PROPOSED FOR FY 2017:

Funding provides for technical assistance to Tribes in a variety of areas related to water and related resources including: tribal water needs assessments, smaller-scale upgrades and repairs to water supply systems, water quality studies, efficiency improvements, habitat restoration, and groundwater quality and contamination studies.

Funding supports Reclamation's involvement in Indian water rights settlement negotiation and implementation activities which include: (1) funding for Reclamation's involvement on 20 Federal water rights negotiation teams, with three extremely active new teams involving the Hualapai and Tule River Tribes and the Navajo Nation - Utah; (2) funding for Reclamation's involvement on 20 Federal water rights settlement implementation teams; and (3) technical assistance needed in the negotiation process to improve the quality of designs and cost estimates for proposed settlement projects. The funding provides technical support and analysis for Indian water rights negotiations, improves the quality of cost estimates, data gathering, studies, analyses and reviews of settlement options, and enables the capacity to sustain these ongoing improvements. The funding supports Federal negotiations in developing the most cost effective options for reaching settlements and meeting tribal trust responsibilities. In addition, funding continues to be needed to support a broad array of Reclamation's activities associated with recent water rights settlements (White Mountain Apache, Crow, and Aamodt settlements) in which the settlement legislation did not provide full funding for Reclamation involvement.

Water and Energy Management and Development:

<u>Technical Assistance</u> - Continues funding for technical and financial assistance to Indian tribes to increase opportunities for Indian tribes to develop, manage and protect their water related resources. Program activities include assisting Tribes to better understand their water related needs and to develop water resources on Indian reservations through traditional and innovative technologies. \$2,926,000

<u>Negotiation and Implementation of Water Rights Settlements</u> - Continue to provide support for the Secretary's Indian Water Rights Settlement Program in the assessment, negotiation, and implementation phases, including Reclamation participation and leadership on Federal assessment, negotiation, and implementation teams; technical assistance in support of negotiations, including reviews by Reclamation's DEC Office to endeavor to improve designs and costs of settlement projects; and support for the Secretary's Indian Water Rights Office.

Reclamation currently participates on the following negotiation teams: Abousleman (Pueblos of Jemez, Zia, Santa Ana) New Mexico; Blackfeet (Blackfeet Tribe) Montana; Coeur d'Alene Tribe-Idaho, Fallbrook (Cahuilla, Pechanga, Romona Bands) California; Flathead (Confederated Salish & Kootenai Tribes) Montana; Fort Belknap (Gros Ventre & Assiniboine Tribes) Montana; Hualapai Tribe – Arizona; Kerr McGee (Pueblos of Acoma & Laguna) New Mexico; Little Colorado River (Navajo Nation, Hopi Tribe & San Juan Southern Paiute Tribe) Arizona and New Mexico; Lummi (Lummi Nation) Washington; Navajo Nation Colorado River (Main Stream) Arizona; ; Navajo Nation – Utah (Utah); Sif Oidak (Tohono O'odham), Arizona; Tohono O'odham (Tohono O'odham Nation) Arizona; Tule River (Tule River Indian Tribe) California; Upper Gila River/San Carlos (San Carlos Apache Tribe) Arizona; Umatilla – Oregon; Walker River (Walker River Paiute Indian Tribe, Bridgeport Indian Colony & Yerington Paiute Tribe) Nevada; Yavapai-Apache (Yavapai-Apache Nation) Arizona; Zuni/Ramah Navajo (Pueblo of Zuni & Navajo Nation) New Mexico and Arizona.

Reclamation currently participates on the following implementation teams: Aamodt (Pueblos of Nambe, Pojoaque, San Ildefonso & Tesuque) New Mexico; Animas La Plata-Ute Mountain Tribe, Southern Ute Indian Tribe- Colorado; Crow (Crow Tribe) Montana; Duck Valley (Shoshone-Paiute Tribes) Idaho and Nevada; Fallon - Nevada; Fort Hall - Idaho; Fort McDowell - Arizona; Gila River Indian Community - Arizona; Navajo-San Juan (Navajo Nation); Nez Perce - Idaho; Pyramid Lake - Nevada; Rocky Boy's (Chippewa Cree Tribe) - Montana; San Carlos - Arizona; San Luis Rey - California; Southern Arizona Water Rights Settlement Act - Arizona; Taos (Pueblo of Taos) New Mexico; Uintah and Ouray Utes - Utah; White Mountain (Apache Tribe) Arizona; Zuni Heaven - Arizona; Hualapai Tribe - Arizona. 6,089,000

<u>Program Support and Outreach</u> - Continue to provide for: (1) developing and coordinating guidance for carrying out Reclamation activities in a manner consistent with Federal Indian law and policies in such areas as the Indian trust responsibility, government-to-government consultation, and the Indian Self-Determination and Education Assistance Act; (2) training for Reclamation managers and staff to enable them to work more effectively with Tribes; (3) support for Native American Affairs Program Managers and Liaisons in each of Reclamation's regions; (4) outreach to Tribes, which is carried out through close coordination with the Regions; (5) working with other Federal agencies to develop partnerships to support tribal water resources needs; and (6) coordination, guidance and administration of Reclamation's Native American Affairs Program. The decrease of \$500,000 is due to the one time funding of Native American Graves Protection and Repatriation Act activities.

1,410,000

Reclamation Request

\$10,425,000

Negotiation and Administration of Water Marketing

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: The program provides for the administration of water related contracts and operational studies for marketing purposes. Activities include policy formulation, compliance with legal requirements, and development, review, and execution of water related contracts. Activities also include Federal and State legal reviews to keep current with contract standards and activities required by the Reclamation Act of 1902, as amended and supplemented (Act). The Act requires that State statutes dealing with water rights be followed, e.g., major water right filings, litigations, reports, water use, accounting, development, review, Indian reserve rights, and administration problems involved in a number of Reclamation projects, along with other Federal, State, and private issues.

AUTHORIZATION: Reclamation Act of 1902, as amended and supplemented, June 17, 1902; and P.L. 260, Reclamation Project Act of 1939, August 4, 1939, as amended and supplemented.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's Priority

Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$1,728,000	\$1,764,000
Enacted/Request	\$1,728,000	\$1,764,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$1728,000	\$1,764,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$1,728,000	\$1,764,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues Regional contract administration for repayment contracts, water service contracts, operation and maintenance agreements, fishery enhancement and mitigation agreements, and all other legal documents committing Federal projects, facilities, and resources. Continues administration of Regional water rights program to protect and advocate for project water rights and to ensure protection of Federal investments. Continues review, drafting, approval, and compliance of contracts, repayments, and water right actions, agreements, and correspondence to ensure conformance to and compliance with Federal and State laws, agency policies, and directives to ensure protection of the Federal investment. Continues creation and review of draft contracts for Indian Water Rights Settlements to ensure conformance with current project authorizations and the proposed settlement. Continues financial and economic impact analysis of proposed Indian Water

Rights Settlements on Reclamation projects, present repayment contracts, and operational agreements for those projects. Continues Federal and State legal reviews and amendments to keep current with contract standards, authorizing acts and statutes providing for water rights.

\$1,764,000

Reclamation Request

\$1,764,000

Operations and Program Management

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: This activity provides funding for efficient management and evaluation of Reclamation's operations-related programs. There is a need for consistency and standardization in how Reclamation performs its operation and maintenance (O&M) activities in the area and regional offices. The activity will assist offices in Reclamation to increase awareness of the kinds of business practices that are necessary to be fiscally responsible and accountable to the taxpayers. In addition, the activity will assist in fulfilling agency goals and objectives in water resources management.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$962,000	\$1,132,000
Facility Operations	1,213,000	1,222,000
Facility Maintenance and Rehabilitation	334,000	434,000
Enacted/Request	\$2,509,000	\$2,788,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$2,509,000	\$2,788,000
Prior Year Funds/Non Federal	0	0
Total Reclamation Allotment	\$2,509,000	\$2,788,000

WORKED PROPOSED FOR FY 2017:

Water and Energy Management and Development - This activity provides for assistance to the regional and area offices in the management and implementation of operations-related programs and associated activities. These activities are Reclamation-wide in scope and span all Reclamation programs. These activities include implementation of consistent and standard business practices; technical support; adequate and reliable information sharing within Reclamation on operations-related facilities and programs; developing and updating proposals and related performance measurement information for improved budget integration for Reclamation's program activities, including planning, construction, O&M, and environmental protection; and fulfilling agency goals.

Subtotal, Water and Energy Management and Development

\$1,132,000

Facility Operations - This activity provides for the management of Reclamation-wide O&M-related programs and supports the regional and area offices' implementation of these programs. Operations and Program Management activities includes staff support to the Facilities O&M Team and Capital Asset and Resource Management Application (CARMA) Change Control Board/Steering Committee, and provides information, assistance, and policies, directives, and guidance to the regions on O&M matters, the assessment of facility condition/reliability, and asset management practices to promote consistency on a Reclamation-wide basis. There is a need for consistency and standardization in how Reclamation corporately performs activities by the area and regional offices related to maintaining the structural integrity and operational reliability of our infrastructure and facilities. This activity will assist offices in Reclamation to increase awareness of the kinds of business practices that are necessary to be fiscally responsible and accountable to the public.

Environmental Management - The activities include; program coordination, guidance development, data collection and reporting, and technical advice and assistance to regional offices to achieve Executive Order (E.O.) 13693 sustainability goals of reducing energy and water (potable and other) use; inventorying and reducing scopes 1, 2, and 3 greenhouse gas (GHG) emissions; shrinking Reclamation's carbon footprint; achieving high performance sustainable buildings, and utilizing Environmental Management Systems (EMS). To meet the requirements of the E.O. 13693, the Energy Independence and Security Act of 2007 (EISA) and other statutes, Reclamation will conduct energy and water and guiding principle evaluations at its facilities and identify and implement energy and water conservation measures and other sustainability elements. EISA and EMS audits to verify conformance to Federal regulations and Reclamation EMS policy, and directives and standards are required every four and three years, respectively. To enhance internal staff capabilities and achieve the goals of E.O. 13693, employees will be trained in evaluating and reducing GHG emissions, EMS, EMS auditing, sustainable buildings, energy and water management, and other sustainability components. Improved data management and verification activities will continue.

Subtotal, Facility Operations

1,222,000

Facility Maintenance - Continue to provide for the dissemination of information on O&M management techniques and procedures to be applied to facilities on a Reclamation-wide basis. 35,000

<u>Design, Cost Estimating and Construction (DEC)</u> - Funding provides for the oversight and implementation of Design, Cost Estimating and Construction (DEC) activities. The independent oversight reviews ensure products related to design, cost estimating and construction are technically sound and appropriate for Reclamation decision making. This includes ensuring cost estimates for a project are appropriate for their intended purpose, potential fatal flaws in the designs or estimates are identified, and all risk and uncertainties have been fully addressed in the estimates.

399,000

Subtotal, Facility Maintenance

434,000

Reclamation Request

\$2,788,000

POWER PROGRAM SERVICES

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: The program provides guidance and support for the nation's second largest producer of hydroelectric energy. Reclamation owns 76 hydroelectric power plants and operates and maintains 53 of those plants. Reclamation is the Nation's second largest producer of hydroelectric power, generating over 40 million megawatt hours of electricity per year, (enough to meet the annual needs of over 3.5 million United States households), and collecting nearly \$1.0 billion in gross power revenues for the Federal government. It would take more than 23.5 million barrels of crude oil or about 6.8 million tons of coal to produce an equal amount of energy with fossil fuels. As a result, Reclamation's facilities preclude the production of over 27 million tons of carbon dioxide that would have been produced by fossil fuel power plants.

The program provides policy; directives; technical guidance and assistance; coordination services; development of standards, procedures, and instructions; and direction, oversight, and coordination of Federal Energy Regulatory Commission (FERC)/North American Electric Reliability Corporation (NERC)/Western Electricity Coordinating Council (WECC) compliance activities. The program conducts workshops and training sessions related to power operation and maintenance practices for personnel, represents the power program on industry councils, conducts engineering and operational studies, collects and disseminates power program data, creates power benchmarking statistics, and establishes Reclamation-wide power program performance measures. Furthermore, the program provides technical and consultation activities to assist regions, areas, and projects in accomplishing safe and efficient power facility operations. Activities include the Reclamation-wide power-related work activities that are considered standard electric utility business expenses and are repaid through power revenues.

The program also supports Administration and Department of Interior (Interior) renewable and clean energy initiatives. The program collaborates with other Federal agencies and industry groups on renewable energy integration and climate change studies; identifies opportunities and impacts of integrating renewable and clean energy into Reclamation infrastructure and operations; and identifies opportunities to improve Reclamation power generation efficiencies and environmental performance.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902; P.L. 59-103, Town Sites and Power Development Acts, April 16, 1906; P.L. 66-280, Federal Water Project Act, June 10, 1920; P.L. 70-642, Boulder Canyon Project Act of 1928, December 21, 1928; P.L. 74-409, Rivers and Harbors Act, August 30, 1935 (49 Stat. 1028); P.L. 75-329, Bonneville Project, August 20, 1937; P.L. 76-260, Reclamation Project Act of 1939, August 4, 1939; P.L. 78-534, Flood Control Act of 1944, December 23, 1944; P.L. 90-542, Wild and Scenic Rivers Act, October 2, 1968; P.L. 91-190, National Environmental Policy Act, January 1, 1970; P.L. 93-205, Endangered Species Act of 1973, December 28, 1973; P.L. 93-454, Federal Columbia River Transmission System Act, October 18, 1974; P.L. 95-91, Department of Energy Organization Act, August 4, 1977; P.L. 95-217, Clean Water Act of 1977, December 27, 1977; P.L. 95-617, Public Utility Regulatory Policies Act, November 9, 1978; P.L. 96-223, Crude Oil Windfall Profit Tax of 1980, April 2, 1980; P.L. 96-294, Energy Security Act, June 30, 1980; P.L. 96-501, Pacific Northwest Electric Power Planning and Conservation Act, December 5, 1980; P.L. 98-381, Hoover Power Plant Act, August 17, 1984; P.L. 99-495, Electric Consumer Protection Act, October 16, 1986; P.L. 102-486, Energy Policy Act of 2005, August 8, 2005.

COMPLETION DATA: This is an ongoing program.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior's Strategic Plan for FY 2014–2018 as follows:

Mission Area: Powering Our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$2,391,000	\$2,391,000
Facility Operations	307,000	307,000
Request	\$2,698,000	\$2,698,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$2,698,000	\$2,698,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$2,698,000	\$2,698,000

NOTE: Power Program Services program also receives direct funding from the Lower Colorado River Basin Development Fund, Colorado River Storage Project Basin Fund, Central Valley Project, and Bonneville Power Administration. The total program request including direct funds is \$6,690,000, of which \$2,698,000 is from Federal appropriations, and \$3,992,000 is from direct funding.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Funding will continue to support Reclamation's work to create automated data collection and archive systems to aid in hydropower benchmarking, performance testing and strategic decision making. Funding will also continue to support Reclamation's work under Reclamation's Sustainable Energy Strategy and activities under the Sustainable Hydropower MOU with our partners Department Of Energy and US Army Corps of Engineers.

Funding will provide for the policy execution and oversight for increased hydropower development at existing Reclamation facilities through Lease of Power Privilege or FERC licensing, and will allow Reclamation to work with Tribes to assist them in developing renewable energy sources. Funding will finance studies designed to help Reclamation support the integration of variable renewable resources, and support analyses of the small sustainable hydropower facilities developed under the joint Reclamation/DOE Funding Opportunity Announcement supporting regions, stakeholders, and developers. Reclamation will initiate a study to increase small run of river hydropower's ability to deliver flexible energy to provide grid support and help integrate variable renewable generation resources. These important projects will assist in the production of cleaner, more efficient renewable energy.

Refinement of Reclamation's FERC/NERC/WECC reliability compliance activities and auditing of facilities will continue to ensure compliance with mandatory NERC Standards. This includes interpretation of regulations, participation in compliance standard development and revision, development of mitigation plans, and audit and enforcement of Reclamation's compliance program.

Power operations and maintenance-related support services for the Commissioner and regional and area offices; collaboration with other Federal, Tribal, State, and local governments, power industry constituents, and other interested parties; and ongoing work on power-related cyber security and risk-

based asset management studies will proceed. Continues implementation of national energy strategies and support to regions on FERC licensing, project use power contracts, and power rates and repayment.

Total Funding: \$4,755,000 Direct Funding: (2,764,000)

Senior Leader Hydropower - Funding will provide for Reclamation's overall compliance with the Federal Energy Regulatory Commission Mandatory Bulk Electric System Reliability Standards pursuant to the Energy Policy Act of 2005. Continues collaborative work with other entities in Government and in the private sector as Interior's chair and the Commissioner's representative on hydropower related matters. Provides leadership and guidance on Reclamation's renewable energy initiative including development of new hydropower at Reclamation facilities. Provides support and assistance to Tribes on hydropower development. Continues technical expertise and support to Reclamation's senior directorate on matters impacting hydrogeneration or transmission facilities and contractually related matters. Monitors policy and oversees budget for Reclamation's hydropower program, coordinating strategic business initiatives, including benchmarking processes, standards, and business practices.

400,000

Subtotal, Water and Energy Management and Development

\$2,391,000

Facility Operations - Funding continues development and application of improved processes, inspections, peer reviews, testing procedures, and maintenance procedures for the safe operation and maintenance of Reclamation's power generation facilities; continues coordination of powerplant reviews, inspections, hazardous energy control and arch flash training; continues efforts to meet hydropower maintenance and reliability compliance requirements.

Total Funding: 1,535,000
Direct Funding: (1,228,000)

Subtotal, Facility Operations

307,000

Reclamation Request

\$2,698,000

Public Access and Safety Program

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: The program implements standards for providing access for persons with disabilities, identifies potential safety hazards, and minimizes risk of personal injury and loss of life at Reclamation facilities. Additionally, the program ensures Reclamation is in compliance with the Life Safety Code (National Fire Protection Association 101) by providing for safety and access modifications of Reclamation facilities for general public use, and for the safety of employees operating those facilities.

AUTHORIZATION: P.L. 93-112, Section 504 of the Rehabilitation Act of 1973; P.L. 93-251, Water Resource Development Act of March 7, 1974; and P.L. 101-336, Americans With Disabilities Act, July 26, 1990.

COMPLETION DATA: This is an ongoing program.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the

Facility Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$596,000	\$593,000
Facility Operations	206,000	206,000
Request	\$802,000	\$799,000
Non-Federal	0	0
Prior Year Funds	10,743	0
Total Program	\$812,743	\$799,000
Prior Year Funds/Non-Federal	(10,743)	0
Total Reclamation Allotment	\$802,000	\$799,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues administration and oversight of the program, including issuance of policy and guidance; providing training for area office coordinators, recreation and engineering staff, as well as recreation managing partners; tracking of accomplishments; providing technical and general guidance and direction; reviewing drawings and specifications; evaluating new facilities and monitoring existing facilities; management of data and responding to data calls. Continues evaluation of Reclamation facilities for compliance with Federal accessibility standards, responding to reporting requirements, and processing complaints. Continues management of the Accessibility Data Management System designed to enact action plans for accessibility compliance.

Subtotal, Water and Energy Management and Development

\$593,000

Facility Operations – Continues to ensure Reclamation compliance with National Fire Protection Association (NFPA) 101, Life Safety Code, by executing the Life Safety Code Compliance Implementation Plan. Continues to support the Reclamation Safety and Occupational Health Program by working to ensure the safety of Reclamation employees and visitors and protection of Reclamation assets through implementation of all NFPA codes and standards and Occupational Safety and Health Administration (OSHA) regulations and standards. Continues monitoring and evaluation of safety procedures, fire prevention, fire protection and life safety at Reclamation facilities. Reviews deficiencies, tracks corrections and consults on complex technical safety and fire hazards. Activities include reviewing safety procedures and programs and oversight of fire prevention, fire protection and life safety code implementation at all Reclamation owned and operated facilities. Evaluates implementation of operational safety, fire prevention, fire protection and life safety code upgrades to assist Reclamation in the responsibility of providing a safe workplace. Supports Reclamation's knowledge advancement in NFPA codes and standards and OSHA regulations and standards. Continues periodic site assistance visits to evaluate and monitor safety program, fire prevention, fire protection and life safety activities.

Subtotal, Facility Operations

206,000

Reclamation Request

\$799,000

Reclamation Law Administration

LOCATION: The 17 Western States in Reclamation's Service Area

DESCRIPTION/JUSTIFICATION: The program provides for the implementation, administration, and enforcement of the acreage limitation provisions of Federal Reclamation law, including the Reclamation Reform Act of 1982 (RRA), as amended. The program ensures that water districts, individual contractors, and individual water users are in compliance with Federal Reclamation law, the Acreage Limitation Rules and Regulations and associated policies. A program of water district reviews, special reviews, and audits is used to ensure compliance with these statutory and regulatory provisions and policies.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902; P.L. 84-984, Small Loan Reclamation Projects Act of 1956, August 5, 1956; P.L. 97-293, Reclamation Reform Act, October 12, 1982; P.L. 100-203, the Omnibus Budget Reconciliation Act of 1987, December 22, 1987; and P.L. 100-503, Administrative Procedure Act, October 18, 1988.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$2,323,000	\$2,189,000
Request	\$2,323,000	\$2,189,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$2,323,000	\$2,189,000
Prior Year Funds/Non-Federal/Other Federal	0	0
Total Reclamation Allotment	\$2,323,000	\$2,189,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development – Continues administration and enforcement of the Reclamation Reform Act (RRA), as well as improving RRA forms and communication to enhance program administration and customer service. Continues activities, such as acreage limitation determinations, oversight of water user compliance, and training of Reclamation and irrigation district personnel, to ensure compliance with the RRA.

Reclamation Request \$2,189,000

Recreation and Fish and Wildlife Program Administration

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: The program provides funds for Reclamation's support of natural, restored, and artificially designed fish and wildlife habitats; for evaluating impacts of existing Reclamation project operations on wetlands and endangered species habitat; and for support of recreation, and fish and wildlife management and conservative use of the available water supply. The program also provides administrative guidance and support for rehabilitation of recreation areas to bring facilities up to current public health and safety standards; to correct facility design deficiencies; to bring facilities into compliance with Section 504 of the Rehabilitation Act of 1973, as amended, to protect the original Federal investment and to prevent the turn-back of facilities to Reclamation; and to seek non-Federal managing partners to manage recreation areas to save the Federal government the expense of operating those recreation areas. Partnerships are formed with non-Federal natural resource conservation groups (States, Tribes, and private entities), and Reclamation's national Memorandum of Understanding (MOU) partners. In addition, the program provides for studies and planning opportunities in liaison with cooperating recreation interests, concessionaires, and fish and wildlife management agencies, and support of the "Catch a Special Thrill" (CAST) program for the special needs public.

AUTHORIZATION: The Migratory Bird Treaty Act, July 3, 1918; The Fish and Wildlife Coordination Act, March 10, 1934; P.L. 84-1024, The Fish and Wildlife Act of 1956, August 8, 1956; P.L. 85-624, Fish and Wildlife Coordination Act of 1958, August 12, 1958; P.L. 88-578, Land and Water Conservation Fund Act of 1965, September 3, 1964; P.L. 89-72, Federal Water Project Recreation Act, July 9, 1965, as amended; P.L. 90-573, National Trails System Act, October 2, 1968; P.L. 91-190, National Environmental Policy Act, January 1, 1970; P.L. 93-112, Rehabilitation Act of 1973; P.L. 93-205, Endangered Species Act of 1973, December 28, 1973, as amended; P.L. 94-579, Federal Land Policy and Management Act, October 21, 1976; P.L. 95-616, Bald Eagle Protection Act of 1978, November 8, 1978; P.L. 96-366, Fish and Wildlife Conservation, September 29, 1980; and P.L. 93 320, Colorado Salinity Control Act, June 24, 1974; P.L. 98 569, Colorado River Basin Salinity Control Act Amendment, October 30, 1984; P.L. 104 298, Water Desalination Act, August 1, 1996; and P.L.101-233, North American Wetlands Conservation Act, December 13, 1989, P.L. 98-381,Non-indigenous Aquatic Nuisance Prevention Control Act; P.L. 104-332, National Invasive Species Act; P.L. 102-393, Alien Species Prevention and Enforcement Act; Executive Order 13112 (February 1992).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measure: Percent of baseline acres infested with invasive plant species that are controlled

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watershed's for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Land Management and Development	\$136,000	231,000
Fish and Wildlife Management and Development	2,066,000	1,958,000
Enacted/Request	\$2,202000	\$2,189,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$2,202,000	\$2,189,000
Prior Year Funds/Non-Federal	0	
Total Reclamation Allotment	\$2,202,000	\$2,189,000

WORK PROPOSED FOR FY 2017:

Land Management and Development -

Continues ongoing technical oversight and compliance of recreation areas managed by Reclamation and those managed by partners. Activities include review, development and administration of recreation management agreements, leases, and concession contracts. Continues work on Section 504 coordination, field reviews, GPRA goals, and review of operation and maintenance of facilities located in Colorado, Montana, Nebraska, Kansas, North and South Dakota, Oklahoma and Texas. Support efforts to connect the public to the public lands; including the America's Great Outdoors.

Subtotal, Land Management and Development

\$231,000

Fish and Wildlife Management and Development-

Colorado, Montana, Nebraska, Kansas, North and South Dakota, Oklahoma and Texas - Continues work on planning and provisions for enhancement of fish and wildlife habitat on Reclamation lands open for public fish and wildlife recreational use while conserving species and habitat listed or proposed for listing under the Endangered Species Act. Activities include providing policy guidance, database management, conducting pilot projects, oversight of grants and cooperative agreements, and conducting wildlife mitigation land compliance reviews.

Arizona, California ,Nevada - Continues fish and wildlife management, administration, public outreach including participation in invasive species working groups, coordination efforts with other agencies involving natural resources on Reclamation lands, and public education activities associated with the program.

Continues coordination of the Zebra and Quagga Mussels Program throughout the Mid-Pacific Region to include outreach to water users and Federal, State, and local agencies. Funding will provide for the expansion of prevention activities including: watercraft inspections and certification policies, installation of vessel washing stations, and public outreach campaigns that will be used to slow the spread of invasive mussels and increase public awareness. Additionally, funds would allow the continuation of seasonal monitoring efforts for the detection and tracking of population spread; mapping of outbreaks; water quality monitoring; engineering modifications; and procurement and installation of equipment to maintain water deliveries.

Continues surveying and monitoring studies of resident and migratory species which are locally/regionally important wildlife species, and their habitats to determine breeding areas, reproductive success, diet, and population size within the Lower Colorado Regional area.

Continues cooperative wildlife harvest/use data collection programs with other State and Federal agencies (e.g., hunting, trapping, and wildlife viewing). Funding provides training resources necessary to enhance staff knowledge in surveying for target species.

Continues fishery surveys of Lakes Mead, Mohave, Havasu, and the Colorado River above and below those reservoirs, in addition to other waters within the bounds of the Lower Colorado Region, and managed by Reclamation. Surveys include netting, shocking, and trapping fishes; conducting water quality sampling; limnology studies; telemetry studies; and participating in habitat improvement programs.

Continues coordination and monitoring efforts to contain, manage, and possibly reduce the Zebra and Quagga mussel populations in the Lower Colorado River and reservoirs including outreach to water users and Federal, State and local agencies. The Quagga mussel is a rapidly reproducing invasive species that has infested the Colorado River System and is greatly impacting the system's operations and management. The mussels block water intake structures, impacting pumping capabilities for power and water operation, affecting the water supply. This blockage results in damage to the structures, requiring additional repairs or replacement of equipment.

Prevention activities such as boat inspections and installation of vessel washing stations may be used to slow the spread. Additional tasks may include monitoring for detection and population; mapping of outbreaks; water quality monitoring; engineering modifications; and procurement and installation of equipment to maintain water deliveries.

Continues wildlife surveys at Lake Pleasant and bat monitoring and yellow-billed cuckoo surveys at 3 Links Farm and the Lower San Pedro River Preserve.

Continues information sharing, research, and management options with its stakeholders and the public, including data collection in Lakes Mead, Mohave, Havasu, and the Colorado River. Outreach activities are conducted in schools, at educational events, and at other locations such as boat launches and Public Lands Days.

Continues assisting Federal and State partners with fishermen and boater access problems associated with severe drawdown of Lake Mead; continues conducting underwater assessments of sport fish habitat structures and fishing docks for the Lake Havasu Fishery Improvement Program; continues conducting "Catch a Special Thrill" (CAST) event on Lake Mead; continues participating in mentoring and educational programs with local schools and civic groups; and continues assisting partners with maintaining and improving trail systems, wildlife viewing areas, and other resources on Reclamation lands.

Idaho, Oregon, Washington, and portions of Montana and Wyoming - Continues partnering with "Catch a Special Thrill" events at Henry Hagg Lake, Black Canyon, Potholes, Lake Walcott, Prineville, and Sarge Hubbard. CAST is an adaptive environment where special needs children are given the opportunity to experience America's great outdoors.

New Mexico, Utah, Wyoming - Continues program management and analysis on recreation, fish and wildlife; policy guidance, and interpretation; database management; and regional oversight of grants and cooperative agreements. A minimal amount of the funding goes towards recreation, including management of the CAST program; with the remaining funding going towards control of invasive species.

Continues work on the control of the quagga and zebra mussels throughout the region. Continues program management related to fish and wildlife throughout the region.

Subtotal, Fish and Wildlife Management and Development Request

1,958,000

Reclamation Request

\$2,189,000

Research and Development Desalination and Water Purification Research Program

LOCATION: Nationwide

DESCRIPTION/JUSTIFICATION: This program provides financial assistance for desalination and water purification research and development leading to improved technologies for converting unusable waters into useable water supplies. Expanding water supplies through advanced water treatment is central to a strong portfolio of climate change adaptation tools that water managers need to adapt to changes in water availability. It also contributes to Reclamation's goal of creating new water supplies in a sustainable manner and thereby relieving stress on Western communities, Native Americans, and the Western river basins supporting Reclamation projects.

Program priorities include; development of improved methods of desalination, incorporating renewable energy into desalination processes, and reducing the costs. Environmental impacts of treating impaired waters including; sea water, inland brackish groundwater, municipal wastewater, and produced waters from oil and gas extraction activities. Through the program's competitive funding opportunity announcements, Reclamation awards research and development cooperative agreements with non-Federal recipients. Through these funding opportunities, the program leverages investment from other federal and non-federal entities to facilitate the advancement and deployment of new technologies. Knowledge generated from this investment is made available to communities, organizations, and industry.

In addition to research and development financial assistance, the program also supports the operation and maintenance of Reclamation's Brackish Groundwater National Desalination Research Facility (BGNDRF). This facility provides pilot and field test facilities for program award recipients as well as other research and development entities working in government, private, academic and other sectors.

AUTHORIZATION: P.L. 57-161, The Reclamation Act of 1902, Sec. 1 and Sec. 2, June 17, 1902; P.L. 111-11, Omnibus Public Land Management Act of 2009, Subtitle F, Sec. 9509, March 30, 2009; P.L. 104-298, Water Desalination Act of 1996, Oct. 11, 1996; Energy and Water Development Appropriations Act, 2004, § 210, Pub. L. 108-137, 117 Stat. 1850; P.L. 102-575, Reclamation Wastewater and Groundwater Study and Facilities Act of 1992, Title XVI, Sec. 1605, October 30, 1992, as amended.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior's Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

COMPLETION DATA: This is an ongoing program.

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development 1/	\$2,305,000	\$4,653,000
Facility Operations	1,105,000	1,150,000
Enacted/Request	\$3,455,000	\$5,803,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$3,455,000	\$5,803,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$3,455,000	\$5,803,000

^{1/}The Federal share of the overall cost of research and development projects issued through competitive awards shall not exceed 50 percent of the total cost.

Explanation of Significant Changes in Funding: The program's FY 2017 President's Request is increased by \$2,348,000 from the 2016 enacted. This increase will support additional research and development in areas such as managing the waste stream produced by advanced water treatment technologies (i.e. concentrate management), developing renewable energy-powered water treatment systems, treating non-traditional water sources, assessing rural water needs, and reducing cost and environmental impacts of desalination. The increase may also be used to increase technology transfer activities as well as pilot and maturation level type research conducted at Reclamation's BGNDRF and Water Quality Improvement Center, which will facilitate the adoption and use of new technologies.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development

The program will continue to fund research and development projects awarded through competitive and merit-based funding opportunities that prioritize development of improved methods of desalination and associated concentrate disposal. Development of renewable energy-powered treatment systems, developing treatment systems applicable to small rural communities, and reducing the costs and environmental impacts of treating impaired waters including; sea water, inland brackish groundwater, municipal wastewater, and produced waters from oil and gas extraction activities. Funding opportunities will be designed to support new laboratory scale research studies, to support new and ongoing pilot-scale projects, and to facilitate the adoption, testing and use of new clean water technologies that are in the maturation stage. The funding opportunities will result in cooperative agreements being established with private sector, academic institutions, non-profits, and non-Federal governmental award recipients throughout the United States. Lastly, this request includes funds for results dissemination and technology transfer activities necessary to facilitate the maturation and implementation of new technologies that can increase the Nation's water supplies.

Subtotal, Water and Energy Management and Development

\$4,653,000

Facility Operations

Continues administration and operation and maintenance (O&M) of BGNDRF, will support testing of four to six brackish desalination pilot plants studying renewable energy, small scale systems, and concentrate disposal. Other areas that will be supported are continuation of staff training, attendance to events to promote the facility, and additional technology transfer activities to increase the quantity and quality of clients that utilize the facility.

Subtotal, Facility Operations

1,150,000

Reclamation Request

\$5,803,000

LOCATION: 17 Western States in Reclamation's Service Area

DESCRIPTION/JUSTIFICATION: The Science and Technology (S&T) Program is the primary research and development (R&D) program for Reclamation.

The S&T Program, managed by Reclamation's R&D Office, is an applied R&D program that addresses the full range of technical issues confronting Reclamation water and power managers and their project stakeholders. The program has contributed many tools and capabilities now used by Reclamation and western water managers. Program products strengthen the scientific basis of Reclamation's decision-making related to policy development, program implementation, and water and power operations.

Program goals are to identify the technical and scientific problems affecting accomplishment of Reclamation's mission, to promote development of cost-effective solutions, and to communicate those solutions to Reclamation offices, other water and power management officials, and the general public. Program funding is allocated and coordinated across four areas: (1) Research and Development Projects (including those related to Sustainable Infrastructure and Safety, Open Water Data Initiative, Climate Change and Variability and Renewable Energy), (2) Water and Power Technology Prize Competitions, (3) Technology Transfer, (4) and Dissemination / R&D Infrastructure.

<u>Research and Development Projects</u>: Program projects address a wide range of science and technical challenges facing Reclamation water and power managers spanning four domains:

- Conserving or Expanding Water Supplies
- Environmental Issues in Water Delivery and Management
- Water and Power Infrastructure Reliability
- Water Operations Decision Support

Prioritization under each domain is guided by input from Reclamation end-users and informed by perspectives from partner agencies and stakeholders. The program invites research projects through internal research solicitation and external research brokering. Internally solicited research funding is awarded to employees' Bureauwide, based on proposal relevancy to Reclamation's mission and on technical adequacy. Projects address any of the four domains and typically have strong cost-sharing and collaboration with Reclamation end-users, stakeholders, other agencies, and/or universities. External research brokering complements the internal research solicitation and is managed to be responsive to agency science priorities that evolve over time and typically cross-cut the four domains. Such brokering often involves leveraging external expertise and specialized collaborative capabilities, which enables targeted research that more rapidly addresses priority science, and complements progress achieved through the internal research solicitation. Brokered research is implemented through contracts, cooperative agreements, interagency agreements, and Technology Transfer agreements as needed. Current program priorities are (in alphabetical order):

- Advanced Water Treatment: Reclamation is making strides to expand useable water supplies in the western U.S. through development of technologies that can reduce the cost and environmental impacts of desalination and other forms of water treatment. These technologies may be applied to seawater as well as non-traditional sources such as wastewater effluent or degraded inland ground and surface waters. S&T program funding in this priority area is typically led by Reclamation's desalination research experts and may also utilize Reclamation's world-class research facilities. Reclamation's portfolio of internally led research complements external research funded through the Desalination and Water Purification Research Program. External expertise is leveraged by collaborating with stakeholders, municipalities, and other Federal agencies. U.S. industry partnerships are formed through Technology Transfer authorities to develop, mature, demonstrate, and commercialize new technologies.
- Climate Change and Variability Adaptation: Reclamation is actively engaged in improving our ability to predict, and effectively adapt to the risks and impacts of climate change and variability on western water resources. The program supports development of technical tools and science that Reclamation and other western U.S. water managers can use to better adapt to the hazards posed by short-term weather and climate variability (from floods to droughts) as well as those posed by long-term climate change. Program products are used in planning and assessments supported by Reclamation region and area offices as well as bureau-wide programs (e.g., WaterSMART Program, Dam Safety Program). External expertise and collaborative capacities are leveraged through the Climate Change and Water Working Group (CCAWWG), the Department of the Interior (Department) Climate Science Centers (CSCs), Department Landscape Conservation Cooperatives (LCCs), universities, and other collaborative forums. In addition to research, brokered activities include development and piloting of climate adaptation training resources for Reclamation, other Federal, and non-Federal water resources communities, partnering with CCAWWG agencies, the University Corporation for Atmospheric Research COMET Program, and the University of California San Diego (UCSD) Center for Western Weather and Water Extremes.
- Open Water Data Initiative: Reclamation is addressing the requirements of the President's Executive Order Making Open and Machine Readable the New Default for Government Information and the Open Water Data Initiative by working towards making Reclamation's water and related data better managed, more comparable across locations, more findable, and more shareable with other agencies, stakeholders, and the public. An internal Open Data Team having bureau-wide representation has been formulated to identify bureau-wide needs and strategic goals, implemented through a mix of internally solicited and brokered development of technologies, tools and approaches
- Invasive Species Management: Invasive species have the potential to inhabit waters and lands managed by Reclamation and cause damage to facilities, operations, and the environment. The focus in the recent past has been monitoring, detecting, and controlling invasive quagga and zebra mussels as they continue to spread in the West, infesting Reclamation dams, power plants, and facilities of other water providers thus threatening the continuity of water and power deliveries. As we gain a better understanding of how to monitor, detect, and control for mussels, some of the technologies and practices developed to address mussels will be explored for potential application to help management of other types of invasive species.

- Renewable Energy: The western U.S. demand for clean, renewable energy continues to increase. In response, the program is prioritizing research to reduce operation and maintenance costs, reduce failures, and increase overall reliability and efficiency of Reclamation's hydropower generation infrastructure. Small improvements in hydropower efficiency can provide a large return on the research investment in terms of total additional power generation and power revenues. The program also considers opportunities for non-hydropower renewable energy research and development, such as solar, wind, and geothermal development that can be facilitated by Reclamation and/or integrated into Reclamation operations. Key external collaborators include U.S. Army Corps of Engineers, U.S. Department of Energy's (DOE) Oak Ridge National Laboratory, DOE National Renewable Energy Laboratory, as well as other government, private-sector, and university-based research centers.
- Sustainable Infrastructure and Safety: Reclamation is developing technologies to extend operating life and reduce maintenance costs of Reclamation's fleet of dams, canals, water control, transmission, and other structures. The US Army Corps of Engineers is a key collaborator in identifying priority areas for infrastructure research and partnering to create and test effective solutions, enabling more efficient use of each agency's specialized expertise, labs, and testing facilities. This area also emphasizes research to improve the health and safety of Reclamation staff, particularly those working at the projects and in the field.

Water and Power Technology Prize Competitions (Challenges): Reclamation is using prize competitions to harness the innovative capacity of the American public and private sectors to solve problems related to Reclamation's mission and stakeholder interests. Prize competitions complement traditional research by providing an innovation tool that can help find breakthroughs or overcome technical obstacles or complexities. Prize competitions have a proven track record in the private sector for accomplishing game-changing results for both large and small problems. The National Aeronautics and Space Administration, Department of Energy, Department of Defense and a host of other agencies are also now successfully using prize competitions under the America COMPETES Act and other authorities. Reclamation is implementing prize competitions by forming collaborations with other Federal agencies that have a shared interest in the solutions we seek. This approach leverages complementary Federal capabilities, catalyzes interagency working relationships to solve joint problems, and leads to solutions that have a broader impact across the mission of multiple Federal agencies, the stakeholders we collectively serve, and overall public good. Multi-agency collaborations have been formed in three areas central to Reclamation's mission: Infrastructure Sustainability, Water Availability, and Ecosystem Restoration. FY 2015 efforts included co-sponsoring The Desal Prize, a grand challenge led by the U.S. Agency for International Development, and launching initial prize competitions under Ecosystem Restoration. In FY2016, Reclamation will launch prize competitions in all three areas and seek non-Federal partners to co-fund and jointly sponsor prize competitions.

Technology Transfer: Reclamation's Technology Transfer activities are aligned with the October 28, 2011 Presidential Memorandum on Accelerating Technology Transfer and Commercialization of Federal Research in Support of High Growth Businesses and are authorized by the Federal Technology Transfer Act. In response, the S&T Program pursues a variety of joint venture research partnership agreements with the private sector, including Cooperative Research and Development Agreements (CRADAs), Materials Transfer Agreements, and Facility Use Service Agreements, among others, where industry will play a role in maturing and transforming research results into a useable, manufactured product that can be supplied to Reclamation and the broader water management community. CRADAs allow both parties to combine their facilities and expertise on joint-venture research, and include provisions to manage intellectual property in mutually beneficial manners. The Department issued Technology Transfer policies and procedures in May 2014 (761 DM 1) and Directives and Standards were drafted in 2015, released for public comment, and are expected to be finalized in 2016. The Reclamation Directives and Standards call for Reclamation-led research projects that intersect industry interests to pursue CRADAs or other Technology Transfer agreements with industry representative(s) early in the research process so that industry can share the cost of the overall research project and help expedite and guide the lab-tomarket research process. Reclamation also plans to pursue industry CRADA partners to co-sponsor prize competitions that offer the prize competition winners opportunity to negotiate a CRADA or license to further develop or commercialize their winning solution. In addition, Reclamation uses Federal Technology Transfer authorities to protect federal inventions and license them to U.S. industry which creates jobs and helps when competing in global markets.

<u>Dissemination / R&D Infrastructure</u>: Disseminating research results, beyond the Technology Transfer activities described previously, targets a wide audience of Reclamation end-users, stakeholders, and others across the Federal and non-Federal water resources community of practice. The R&D Office is implementing an improved and contemporary knowledge management system in 2015-2016 to support research dissemination and improve research workflow. Features include providing and improving open access to program products, data collections, research reports, and educational resources via print, electronic, and social media.

AUTHORIZATION: P.L. 57-161, The Reclamation Act of 1902, June 17, 1902, as amended; P.L. 99-502, Federal Technology Transfer Act of 1986, October 20, 1986, as amended; P.L. 111-11, Omnibus Public Land Management Act of 2009, March 30, 2009, America COMPETES Reauthorization Act of 2010.

COMPLETION DATA: This is an ongoing program.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department's Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

GOAL: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

Mission Area: Building a Landscape-Level Understanding of Our Resources **Goal:** Provide Shared Landscape-level Management and Planning Tools

Performance Measure: Number of tools registered on the Geospatial Platform that can be used to

support landscape level decision making

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$16,565,000	\$22,765,000
Enacted/Request	16,565,000	22,765,000
Non-Federal and Other Federal 1/	0	0
Prior Year Funds	0	0
Total Program	16,565,000	22,765,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$16,565,000	\$22,765,000

^{1/}Collaborative research typically results in an approximate 1:1 cost-share with other Federal, non-Federal, and private sector organizations.

Explanation of Significant Changes in Funding: The FY 2017 President's Request is an increase of \$6.2 million from the 2016 enacted. Within the overall allocation, Reclamation will provide \$8.5 million for water and power technology prize competitions, primarily to initiate a grand-scale technology prize competition focused on next-generation advanced water treatment technologies that would significantly reduce the cost and electricity usage of advanced water treatment, and also to host other, smaller competitions addressing other challenges in sustainable infrastructure, ecosystem restoration, and water availability; and \$2 million for the Open Water Data Initiative.

WORK PROPOSED FY 2017:

Water and Energy Management and Development

Research and Development Projects: Continue to target projects addressing critical water and power management technical challenges in four domains: Conserving or Expanding Water Supplies, Environmental Issues in Water Delivery and Management, Water and Power Infrastructure Reliability, and Water Operations Decision Support. Continue to emphasize projects in cross-cutting agency priority areas, including:

- Advanced Water Treatment: continue research efforts in the areas of renewable energy powered
 water treatment systems, concentrate management, reducing environmental impacts, reducing the
 cost of desalination, and continue to support innovative technologies to treat non-traditional water
 sources such as wastewater to increase water supplies.
- <u>Climate Change and Variability</u>: improve the methods, information and predictions needed for assessing water operations vulnerabilities and developing associated strategies to build resilience to natural hazards associated with short-term climate variability (from floods to droughts) and longer-term climate change.
- Open Water Data Initiative: continue to make water and related data better managed, more comparable across locations, and more shareable with other agencies, stakeholders, and the public. This effort will include improved accessibility of data in California and to expand the effort in the Colorado River Basin.

- Quagga and Zebra Mussels: develop monitoring, detection and control technologies, and improve understanding mussels' environmental impacts. Explore application of quagga and zebra mussels research and tools to study other invasive species issues impacting Reclamation facilities, operations, and the environment.
- Renewable Energy: improve the reliability and efficiency of Reclamation hydropower generation; and, conduct research and/or capacity building to support integration of non-hydropower renewable energy into Reclamation facilities and operations.
- <u>Sustainable Infrastructure and Safety</u>: develop and demonstrate technologies to extend the working life of existing water and power infrastructure, and to reduce the potential for accidents and injuries to Reclamation staff.

Continue to build external collaborations that provide complementary expertise, provide access to unique capabilities and facilities, share information, and avoid duplication.

<u>Technology Transfer</u>: Continue existing CRADAs with industry that are pursuing breakthrough technological advancements in advanced water treatment and in infrastructure coatings. Pursue additional CRADAs with industry where we have planned or active research on new solutions that intersect industry interests. Pursue license agreements for new Reclamation-owned patented desalination technologies.

Water and Power Technology Prize Competitions (Challenges): FY 2017 funding in this area will primarily be used to launch a grand-scale competition focused on next-generation advanced water treatment technologies that would significantly reduce the cost and electricity usage of advanced water treatment, thereby developing technological breakthroughs that may increase water availability and ease water scarcity impacts experienced by drought-stricken areas of the western U.S. Some funding will also continue to partner with Federal agencies in designing and hosting other smaller technology prize competitions to address challenges in sustainable infrastructure, ecosystem restoration, and water availability.

<u>Dissemination / R&D Infrastructure</u>: Continue efforts to accelerate the application and broader impact of program results, including development of more effective ways of transferring research findings and new solutions to the water and power users, managers, and to U.S. industries where our mission-driven research efforts and capabilities can also create new jobs and increase U.S. economic growth. Continue to improve and maintain the R&D office Knowledge Management System.

Reclamation Request

\$22,765,000

SITE SECURITY ACTIVITIES

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: Reclamation's dams, reservoirs, and power plants constitute a portion of the nation's critical infrastructure and are therefore potential targets for terrorist and other criminal activity. Reclamation's large inventory of water resources infrastructure, which includes five National Critical Infrastructure (NCI) facilities, could present serious risks to the public if an asset were to fail.

Security - The purpose of Reclamation's Security Program is to protect these facilities and systems, Reclamation's critical information, and most importantly, the employees, contractors, and public at or near Reclamation facilities. Security Program activities include prioritizing critical assets; identifying and assessing potential threats, vulnerabilities, and consequences; and mitigating risks through integrated and cost-effective security measures. Site security measures may include facility fortification, surveillance and guard activities, improved security procedures, increased employee awareness, and law enforcement activities.

Reclamation maintains a comprehensive security risk assessment program to evaluate security-related risks at critical Reclamation facilities. The program evaluates potential threats, vulnerabilities, consequences, and current security measures; and makes recommendations for improvements to reduce security-related risks. Asset risk ratings are then used to develop and prioritize annual work plans and schedule annual fortification activities.

Reclamation works closely with other Federal agencies and laboratories to enhance understanding of the potential effects of terrorist activities on dams and related resources and conducts studies and development activities on potential mitigation measures and new technologies. Reclamation represents the Department of the Interior (Interior) on the Dams Sector Government Coordinating Council, the government partner to the private sector Dams Sector Coordinating Council, and provides leadership, collaboration, and coordination of security-related activities with the Department of Homeland Security and other Dams Sector agencies for implementation of the National Infrastructure Protection Plan.

Security Program activities include personnel security and suitability, identity management, information security, operations security, facility security, law enforcement, as well as collaboration and coordination with other program areas such as information technology security, dam safety, and emergency management.

Section 513 of the Consolidated Natural Resources Act of 2008 (P.L. 110-229) establishes that security-related O&M costs are reimbursable under Reclamation law, but increased levels of security-related O&M costs after the events of September 11, 2001 are subject to an annual ceiling. The ceiling is indexed each fiscal year after FY 2008 according to the preceding year's Consumer Price Index. In FY 2017, the security reimbursability ceiling is projected to be approximately \$22.4 million; however, this figure will vary depending on the FY 2016 Consumer Price Index. Costs are expected to exceed the ceiling by approximately \$4.1 million, which will need to be funded with federal dollars.

Law Enforcement – Prior to November 2001, Reclamation had no law enforcement authority, with the exception of the Hoover Dam Police Department. Following the events of September 11, 2001, Congress enacted P.L. 107-69, which gave Reclamation new, but limited law enforcement authorities. Specifically, Reclamation is required to use other Federal, State, local or Tribal law enforcement via contract or Cooperative Agreement, since Reclamation law enforcement officers' police powers are limited to Reclamation projects and/or lands.

In 2002, Reclamation entered into a perpetual Interagency Agreement with the Bureau of Land Management, agreeing to permanently fund labor and associated overhead and support for six directly assigned criminal investigator positions. By agreement, those personnel are assigned to positions directly reporting to Reclamation's Office of Security, Safety and Law Enforcement Office in support of Interior and Reclamation missions.

Reclamation's law enforcement program focuses on counter terrorism and critical infrastructure protection through coordination and execution of additional Interagency Agreements and contracts. By purpose, design, and function, Reclamation's criminal investigators help fill in critical intelligence gaps, offer external and internal access to law enforcement only sensitive systems, directly offer decentralized Regional leadership advice, and provide enhanced deterrence and response capabilities by performing and/or coordinating investigations of criminal activities, internal affairs matters, and/or suspicious incidents associated with Reclamation facilities.

Reclamation's Information Sharing and Law Enforcement Support group analyzes and disseminates information related to Reclamation projects, lands, and facilities; conducts threat assessments; and provides classified intelligence briefings related to Reclamation facilities. These activities support regional special agents and regional security officers through partnerships with the Federal Bureau of Investigation (FBI)/Joint Terrorist Task Force (JTTF), State fusion centers, and other intelligence community organizations.

Departmental Guidance – Reclamation's Site Security budget addresses Interior's program guidance including: (1) completion of security improvements at Interior's critical infrastructures and key resources, (2) threat analysis and dissemination of intelligence information through summary reports and briefings, (3) continuation of studies and investigations with other organizations to help identify critical vulnerabilities, new technologies, and mitigation solutions, (4) continuation of periodic risk assessments to update and re-assess security as new threat, vulnerability, and consequence information becomes available, and (5) validating, testing, and exercising security systems after their installation. Interior must be able to prevent and deter threats to employees, visitors, and vital facilities and infrastructure as well as detect impending danger before attacks or incidents occur.

AUTHORIZATION: Section 251(b) (2) (D) (I) of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended; P.L. 98-552, October 30, 1984. The Consolidated Natural Resources Act of 2008 (P.L. 110-229) was signed into law on May 8, 2008. Section 513 is titled Bureau of Reclamation Site Security and includes provisions for the treatment of Reclamation Site Security Costs, transparency and collaboration, and an annual report to Congress.

COMPLETION DATA: This is an ongoing program.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies **Goal**: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 Budget Request
Facility Operations	\$22,104,000	\$22,104,000
Facility Maintenance & Rehabilitation	4,116,000	4,116,000
Request	\$26,220,000	\$26,220,000
Non-Federal 1/	14,556,000	14,889,000
Prior Year Funds	4,018,830	0
Total Program	\$44,794,830	\$41,109,000
Prior Year Funds/Non-Federal 1/	(18,574,830)	(14,889,000)
Total Reclamation Allotment	\$26,220,000	\$26,220,000

^{1/} The Non-Federal amount includes the up-front funding for the reimbursable security O&M costs.

WORK PROPOSED FOR FY 2017:

Facility Operations –

Security Program: Continues funding for comprehensive and periodic security reviews, risk management, and activities associated with information security, operations security, personnel security and suitability, identity management, security-related policy development and compliance, and fund management. Continues funding for Regional Security Officers, NCI Security Officers, Area Office Security Coordinators, post 9-11 guard and patrol costs, development and maintenance of site security plans, coordination with information technology security functions, participation on the Dams Sector Government Coordinating Council, and coordination with other Dams Sector agencies and Interior's Office of Law Enforcement and Security. Continues funding for studies and reviews to enhance understanding of the potential effects of terrorist activities on dams and related resources as well as potential mitigation measures and new technologies.

Law Enforcement Program: Continues law enforcement program activities and oversight, including administrative functions. Continues to coordinate Reclamation's law enforcement activities with Federal, State, and local law enforcement agencies to enforce laws and regulations on and associated with Reclamation properties. Conducts investigations of potential criminal activity and suspicious activities on Reclamation lands and facilities, to enforce 43 CFR Part 423 (Public Conduct Rule) and other applicable laws and regulations. Assists in conducting threat assessments to determine the potential for terrorist and/or criminal activity at Reclamation facilities.

Continues to analyze and disseminate intelligence information related to Reclamation projects, land, and facilities. Continues partnership with the FBI/JTTF to compile and analyze incident reports and suspicious activities to assist law enforcement officers and security personnel in the protection of Reclamation assets.

Continues implementation activities of the Incident Management, Analysis, and Reporting System (IMARS), a Secretarial Initiative to improve the reporting of law enforcement, security, and emergency management incidents. Continues to provide annual Law Enforcement for Managers training course as mandated by the Department of the Interior, and continues to provide funding for other required law enforcement coordination and training.

\$36,993,000
Non-Federal – Power customers

(14,889,000)

Subtotal, Facility Operations

\$22,104,000

Facility Maintenance and Rehabilitation - Continues security upgrades recommended during Reclamation's security risk assessments of its facilities. Continues work on installation and implementation of needed physical security improvements such as access control systems, barriers, enhanced communications, lighting, remote surveillance systems, alarm systems, and structural modifications to reduce security-related vulnerabilities. Includes replacement of security equipment that has failed or reached the end of its useful life. Physical security enhancements will help protect Reclamation facilities from terrorist threats, other criminal activities, and unauthorized operation of water control systems, and will reduce the security-related risk at critical assets.

Subtotal, Facility Maintenance and Rehabilitation

<u>4,116,000</u>

Reclamation Request

\$26,220,000

WaterSMART Program

"Sustain and Manage America's Resources for Tomorrow"

LOCATION: The 17 Western United States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: As the population of the American West continues its rapid growth it faces serious water challenges related to climate variability and competing demands. Adequate and safe water supplies are fundamental to the health, economy, security, and ecology of the country. To achieve sustainable water management and maintain economic productivity in the western United States, action is required to address current and future water shortages; degraded water quality; increased demands for water from growing populations and energy needs; amplified recognition of environmental water requirements; and the potential for decreased water supply availability due to drought and related climate impacts.

Federal leadership is critical to widespread acceptance and implementation of sustainable water development and management. Secretarial Order 3297, issued in February 2010, established the Department's WaterSMART (Sustain and Manage America's Resources for Tomorrow) Program to stretch and secure water supplies for future generations, coordinate across agencies, to integrate energy and water policies, and to ensure the availability of sound science and information to support decisions on sustainable water supplies. With the budget in FY 2017, Reclamation will continue to help address these concerns through the Department's WaterSMART Program – working to secure and stretch limited water supplies to meet our Nation's water needs. The WaterSMART Program also includes participation from the U.S. Geological Survey as well as coordination across all other Department of the Interior Bureaus.

The WaterSMART Program includes funding for cost-shared grants for water and energy management improvement projects; efforts within the Basin Study Program to evaluate and address the impacts of climate change in river basins throughout the West; Title XVI Water Reclamation and Reuse projects; the establishment and expansion of collaborative watershed groups and funding of watershed management projects through the Cooperative Watershed Management Program(CWMP); smaller-scale water conservation activities through the Water Conservation Field Services Program; activities to identify resilient infrastructure investments; and a comprehensive approach to drought planning and implementation actions that address water shortages. Together, these programs form an important part of Reclamation's implementation of the SECURE Water Act (Subtitle F of Title IX of P.L. 111-11, the Omnibus Public Land Management Act of 2009).

The programs included in WaterSMART are collaborative in nature and work across jurisdictional boundaries to effectively achieve sustainable water management. For example, the Basin Study Program and the CWMP incorporate a regional or watershed approach to address water management on a larger scale, and both programs require participation by diverse stakeholders. The link between energy and water is addressed through WaterSMART Grants, which prioritize funding for water projects that reduce the amount of energy consumed in water management or increase the use of renewable energy. Additionally, WaterSMART supports the assessment of current water supplies, demands, and impacts due to climate change through the use of sound science.

The Basin Study Program – including Basin Studies, Landscape Conservation Cooperatives, and West-Wide Climate Risk Assessments – represents a coordinated approach to developing landscape-level science and projections of future water supply and demand; communicating information and science to other entities and agencies; and working with stakeholders to develop adaptation strategies to cope with water supply and demand imbalances on a collaborative basis.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 as amended; Reclamation Reform Act of 1982, P.L. 97-293; Reclamation States Emergency Drought Relief Act of 1991, P.L. 102-250, as amended; P.L. 102-575, Title XVI, Reclamation Wastewater and Groundwater Study and Facilities Act of 1992, October 30, 1992; P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996; P.L. 105-321, Oregon Public Lands Transfer and Protection Act of 1998, October 30, 1998; P.L. 106-554, Consolidated Appropriations Act, 2001, December 21, 2000, Appendix D, Section 106, Truckee Watershed Reclamation Project; P.L. 106-566, Hawaii Water Resources Act of 2000, December 23, 2000; P.L. 107-344, An Act to Amend Title XVI, December 17, 2002; P.L. 108-7, Consolidated Appropriations Resolution, February 20, 2003; P.L. 108-233, Irvine Basin Surface and Groundwater Improvement Act of 2004, May 28, 2004; P.L. 108-316, Williamson County Water Recycling Act of 2004, October 5, 2004; P.L. 109-70, the Hawaii Water Resources Act of 2005, September 21, 2005; P.L. 110-161, the Consolidated Appropriations Act, 2008; P.L. 110-229, Consolidated Resources Act of 2008; P.L. 111-11, Omnibus Public Land Management Act of 2009, as amended; and the Fish and Wildlife Coordination Act (FWCA), 16 USC 661-666c, as delegated to Reclamation in Departmental Manual (DM) 255 DM 1.1B.

APPROPRIATION CEILING: Section 9504(e) of the SECURE Water Act, Subtitle F of Title IX of P.L. 111-11, the Omnibus Public Land Management Act of 2009, authorized \$200 million to carry out financial assistance agreements for water management improvements. An additional \$100 million of appropriations ceiling was authorized in P.L. 113-59, Consolidated and Further Continuing Appropriations Act, 2015. An additional \$50 million of appropriations ceiling was authorized in P.L. 114-113, the Consolidated Appropriations Act, 2016. Reclamation estimates that approximately \$115 million of the \$350 million authorized appropriations ceiling remained after FY 2015 appropriations. Reclamation will update this estimate once additional FY 2016 funding provided by Congress has been allocated to specific programs. Language is included as part of the 2017 Budget to increase the authorized appropriations ceiling by \$50 million to a total of \$400 million.

WaterSMART Grants, the Water Conservation Field Services Program (WCFSP), and some activities that are part of the Drought Response Program rely upon the authority of Section 9504(e) of the SECURE Water Act. Outside of WaterSMART, Water Conservation Projects and part of the California Bay-Delta Restoration also rely upon the authority of Section 9504(e) of the SECURE Water Act.

Other activities within WaterSMART have separate authorizations of appropriations and do not rely upon the Section 9504(e) appropriations ceiling. These include Basin Studies (Section 9503(f) of the SECURE Water Act), the Cooperative Watershed Management Program (Section 6002(g) of P.L. 111-11), the Title XVI Water Reclamation and Reuse Program (P.L. 102-575, as amended) and certain Drought Response Program activities that rely upon the authority of the Reclamation States Emergency Drought Relief Act (P.L. 102-570, as amended).

Section 301 of the Reclamation States Emergency Drought Relief Act (P.L. 102-250) authorized \$90 million to carry out drought emergency assistance activities. Reclamation estimates that approximately \$12.5 million of the authorized appropriations ceiling remained after FY 2015. Reclamation will update this estimate once additional FY 2016 funding provided by Congress has been allocated to specific programs.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department's Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century, and Extend Water Supplies Through

Conservation

Performance Measure: Percent of basin studies that have been completed, and acre feet of water conservation capacity enabled through Reclamation's Priority Goal Conservation Programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Budget
Water and Energy Management and Development	\$55,554,000	\$59,994,000
Facility Maintenance & Rehabilitation	2,500,000	1,500,000
Enacted/Request	\$58,054,000	\$61,494,000
Non-Federal Funds	0	0
Prior Year Funds	0	0
Total Program	\$58,054,000	\$61,494,000
Prior Year Funds/Non-Federal	0	0
Funding Requested within specific projects	0	0
Total Reclamation Allotment	\$58,054,000	\$61,494,000

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

<u>WaterSMART Grants</u> – This component of the WaterSMART Program implements Section 9504 of the SECURE Water Act by providing cost-shared assistance on a competitive basis. Funding is used primarily to carry out water and energy efficiency improvements, including projects that save water; increase energy efficiency and the use of renewable energy in water management; support environmental benefits (i.e., make conserved water available instream or otherwise address endangered species issues); mitigate conflict risk in areas at a high risk of future water conflict; and accomplish other benefits that contribute to water supply sustainability in the western United States. On-the-ground projects may also include implementation of climate adaptation strategies identified in a completed Basin Study. Other projects may result in water delivery improvements that facilitate future on-farm improvements, carried out with the assistance of the Natural Resources Conservation Service, to accomplish coordinated water conservation improvements. All grant proposals will be evaluated using criteria that prioritize the types of benefits listed above. Projects that include multiple public benefits are given the greatest consideration for funding. In FY 2017, Reclamation will also make funding available for projects that facilitate and support water markets.

WaterSMART Grants leverage Federal funding by requiring a minimum of 50 percent non-Federal costshare contribution. Grants will be available to States, Tribes, irrigation and water districts, and other entities with water or power delivery authority. WaterSMART Grant projects are generally completed within two to three years from the date of funding, unless additional time is necessary to achieve significant program goals. As a result, projects funded under the WaterSMART Program have a nearterm impact on water and energy conservation and improved water management.

In FY 2017, Reclamation anticipates funding between 35-45 new WaterSMART Grant projects to continue working toward increasing conservation and efficiency on a West-wide basis. Reclamation believes that sustainable water conservation, use of markets, and improved efficiency are crucial elements of any plan to address western water issues. \$23,365,000

Cooperative Watershed Management Program – Through this program, the Department provides financial assistance to establish and expand collaborative watershed groups and to fund watershed management projects. As defined in the Cooperative Watershed Management Act, P.L. 111-11, Sections 6001-6006, a "watershed group" is a self-sustaining, non-regulatory, consensus-based group that is composed of a diverse array of stakeholders, which may include, but is not limited to, private property owners, any Federal, State, or local agency that has authority with respect to the watershed, and Tribes. Watershed management projects eligible for program funding include projects that enhance water conservation, improve water quality and ecological resilience, reduce water conflicts, and advance other goals related to water quality and quantity.

To date, Reclamation has been able to implement only Phase I of the CWMP, which supports the development of watershed restoration plans to identify potential projects to be considered for funding in Phase II. The funding level for FY 2017, an increase of \$1.5 million over 2016 enacted, will allow Reclamation to initiate Phase II of the CWMP, providing cost-shared financial assistance for watershed management projects. These on-the-ground projects, collaboratively formed by watershed groups, will address critical water supply needs, water quality, ecological resilience, and other environmental issues so water users can meet competing demands and avoid conflicts that are exacerbated by drought as authorized by Sections 6001-03 of P.L.111-11. In FY 2017, an emphasis will be on ecological resilience and other environmental issues. Funding will be allocated on a competitive basis using established criteria.

Basin Study Program – Reclamation continues implementation of Section 9503 of the SECURE Water Act and the Fish and Wildlife Coordination Act, 16 USC 661-666c, as delegated to Reclamation in 255 DM 1.1B., through the Basin Study Program, including implementation of Basin Studies, West-Wide Climate Risk Assessments (WWCRAs), and Landscape Conservation Cooperatives (LCCs). Activities funded under the Basin Study Program contribute to Reclamation's implementation of Section 9503 of the SECURE Water Act and to meeting the Department's Priority Goal for Climate Change. The proposed level of funding will support new Basin Studies, WWCRA activities, continued support of the Desert and Southern Rockies LCCs, and related efforts that ensure sustainable water supplies in the West. Because Reclamation's water projects include infrastructure operated by State and local governmental entities, and groups and constituencies vitally interested in water issues represent an even broader spectrum, any sustainable path forward must be collaboratively determined. Basin Studies provide an effective tool for bringing together disparate interests, providing the best available science projecting future supplies and demands, including the impacts of climate variability, and developing practical and supportable options and strategies to address any projected imbalances. The Basin Studies are critical to the West, as they address the impacts of climate variability, extreme events such as record droughts and floods, and population increases. The studies are focused in areas with willing State, tribal, and local

partners who provide a minimum of fifty percent of the study costs.

Basin Studies leverage information developed through WWCRAs and LCCs. The WWCRAs provide consistent, baseline assessments of climate impacts to water supply and demand across the West, with an emphasis on how climate variability impacts Reclamation's own operations. Additionally, the WWCRAs support the development of information, guidance and tools needed to integrate climate change information into planning activities across Reclamation's mission areas, including reservoir operations planning, appraisal and feasibility studies, and environmental analyses. Through implementation of the WWCRAs, Reclamation has established an internal climate variability network (the WWCRA Implementation Team) that provides technical expertise and information to support climate adaptation efforts across Reclamation.

The LCCs are partnerships of Federal and State agencies, Tribes, universities, non-governmental organizations, international entities, and local governments, formed to develop and share applied science tools and approaches that support resource management at the landscape scale. In FY 2011, Reclamation and the U.S.Fish and Wildlife Service (FWS) established the Desert and Southern Rockies LCCs. These two LCCs span the upper and lower Colorado River Basin and together include portions of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Texas. In FY 2017, Reclamation and FWS will continue to work with LCC partners to evaluate the science and technical capabilities needed to support the Desert and Southern Rockies LCCs, including: (1) building and expanding on existing applied science tools and capabilities to identify gaps that can be addressed through the Department's Climate Science Centers, universities, and other sources; (2) providing support for adaptation and conservation efforts ongoing in the LCCs, including facilitating data sharing, developing and implementing adaptive management techniques and monitoring plans; and (3) identifying and implementing potential new adaptation strategies to address climate change impacts.

Funding will also be used for pilot efforts to build upon the information developed in Basin Studies to help ensure sustainable water supplies in river basins in the West. For example, the Colorado River Basin is currently experiencing a historic drought that has not been witnessed in over 100 years of recorded history. FY 2017 funding will allow Reclamation to better respond to and mitigate the potential impacts of extended drought and long-term sustainability challenges. These scientific and technical efforts will be carried out in a coordinated and collaborative manner with the ultimate objective of identifying consensus-based Basin-wide solutions for addressing future water supply challenges both in the short and long-term.

5,200,000

<u>Title XVI</u> – Title XVI of P.L. 102-575, as amended (Title XVI), directs the Secretary of the Interior, acting through the Commissioner, to undertake a program to identify and investigate opportunities to reclaim and reuse wastewaters and naturally impaired ground and surface water in the 17 Western United States and Hawaii. Title XVI also includes authority for the Secretary to provide up to 25 percent, or the Federal appropriations ceiling (typically \$20 million), for the cost of planning, design, and construction of specific water recycling projects. The Title XVI Program is an ongoing activity that includes planning, design, and construction activities on a project-specific basis in partnership with local governmental entities.

Funding will be used for authorized projects using selection criteria focused on reducing existing diversions or addressing specific water supply issues in a cost-effective manner, addressing environmental and water quality concerns, and meeting other program goals. Reclamation will also make FY 2017 funding available for competitively awarded research projects related to water recycling and reuse and for the development of feasibility studies for potential new water reuse projects. 21,500,000

<u>Water Conservation Field Services Program</u> – The WCFS is an ongoing activity, established by Reclamation in 1996, to proactively encourage water conservation in the operations of recipients of water from Federal water projects and to assist agricultural and urban water districts in preparing and implementing water conservation plans in accordance with the Reclamation Reform Act of 1982 (RRA). The WCFSP is managed by each of Reclamation's regional offices and implemented at the local level through Reclamation's area offices to address Reclamation-wide water conservation priorities and to meet local goals.

4,179,000

<u>Drought Response and Comprehensive Drought Plans</u> – Ongoing and multi-year droughts across the Western U.S. are resulting in water shortages in many areas, impacting agriculture, municipalities and ecosystem functions. The impacts of drought are far-reaching and can exacerbate tensions over already scarce water resources, increase the risk of devastating fires, and challenge the resources of States, Tribes, and local governments across the West. Compounding these challenges is growing evidence that drought events are becoming more frequent and intense for some regions of the country, and are expected to continue doing so as a result of climate changes over time.

The President's 2013 Climate Action Plan recognizes the importance of managing drought to address the impacts of climate change. Consistent with the direction in the President's Plan, Reclamation initiated the Drought Response Program in FY 2015 to implement a comprehensive new approach to drought planning ("comprehensive drought plans") and to carry out implementation actions under existing authorities. Funding for planning and implementation actions will be allocated through a competitive selection process using an empirical approach that emphasizes involvement from multiple stakeholders and the incorporation of climate variability information, and cost-sharing from non-Federal sponsors.

These comprehensive drought plans and approved implementation actions will help Reclamation avoid drought-related crises in the short term, while laying a foundation for climate resiliency in the long term. These efforts also directly support the National Drought Resilience Partnership, identified in the President's Climate Action Plan—helping communities manage drought and develop long-term resilience strategies, by providing key climate change and drought information.

In FY 2017, Reclamation anticipates awarding funding under three program elements to: (1) develop and update comprehensive drought plans; (2) implement projects that will build long-term resiliency to drought; and (3) implement emergency response actions. To support long-term drought resiliency, the majority of program funding will be used to support drought contingency planning and drought resiliency projects. However, some program funding will be reserved each year for emergency response actions. FY 2017 funding will be awarded through a competitive selection process for comprehensive drought plans, small-scale projects that will build long-term resiliency to drought, and emergency response actions.

In accordance with Section 306 of the 1991 Drought Relief Act, Reclamation is required to report on past and proposed expenditures and accomplishments under the Act. In FY 2015, Reclamation initiated the new Drought Response Program, relying on authorities provided in the 1991 Drought Relief Act, and Section 9054 of the SECURE Water Act. In FY 2015, \$5 million was allocated to the Drought Response Program as part of the \$50 million appropriated for Western Drought Response. This funding was allocated through two competitive funding opportunities, including one for drought contingency plans and another for drought resiliency projects and resulted in the award of 23 plans and projects in nine states. Interest in both funding opportunities was strong. Collectively, proposals under both funding opportunities represented a total request of \$9.8 million in Federal funding. The FY 2016 appropriation included \$2.5 million for the program, an amount that may be increased once additional FY 2016 funding provided by Congress has been allocated to specific programs. Reclamation will begin the process of

allocating FY 2016 funding by releasing Drought Response Program funding opportunity announcements in February 2016. $\underline{4,000,000}$

Subtotal, Water and Energy Management and Development

\$59,994,000

Facility Maintenance & Rehabilitation -

Resilient Infrastructure Investments —In order to ensure our infrastructure is sufficient to accommodate new extremes and support healthy and resilient watersheds, Reclamation is proactively maintaining and improving existing infrastructure for system reliability, safety, and efficiency (i.e., water conservation). Preparing for the impacts of climate variability on Reclamation's infrastructure requires addressing the many stressors impacting investments in infrastructure. Reclamation will continue to identify opportunities to integrate operational efficiencies that are more compatible with climate change adaptation goals while continuing to invest in its existing infrastructure. These efforts directly support the second pillar of the President's Climate Action Plan, to prepare the United States for the Impacts of Climate Change, by "Building Stronger and Safer Communities and Infrastructure, "Maintaining Agricultural Sustainability," and "Preparing for Future Floods."

As part of the President's Climate Action Plan, the U.S. Forest Service and Reclamation work together proactively under the Western Watershed Enhancement Program (WWEP) to protect and improve the health and resiliency of National Forest System watersheds. The WWEP focuses on reducing the potential for uncharacteristically severe wildfire and the risk it poses to Reclamation water supplies and facilities serving irrigation, hydroelectric, municipal, and industrial customers. Working collaboratively with water users, each agency will develop an avoided-cost approach and educate the public and interested parties on the connection between watershed health and avoided costs associated with water-related infrastructure. Reclamation will continue scientific assessment of the wildfire risk in the forests surrounding its reservoirs and once completed, improve criteria for project selection. Subsequent site-specific cost-effective treatments would help mitigate risks to Reclamation and its customers by protecting upland ecosystem and watershed functions on Reclamation lands or on U.S Forest Service lands with a direct connection to Reclamation facilities in order to avoid costs and adverse impacts to water supplies.

An enhanced decision making framework is being developed to identify investments in infrastructure replacement, repair and upgrade, and watershed-management activities. Prioritization of infrastructure investments will be influenced by the new climate criterion as well as watershed management opportunities. These efforts will contribute to Reclamation's climate change adaptation goals. The process will leverage existing baseline assessments of climate variability impacts and other information. New studies or data on the changing climate will help inform the decision-making framework in real time. Additionally, this information can be incorporated into the final plans of the proposed infrastructure investment to refine and improve the actual project design.

In FY 2017, \$1.5 million will be used to select a project using the refined decision making framework and incorporating it into final design considerations. Support will also be provided for ongoing climate training programs to educate the workforce on how to take advantage of climate change adaptation information and how the climate criterion can be applied to the prioritization of Infrastructure Initiative funding needs. A portion of the funding will also be used to further the efforts of the WWEP.

Traditionally, Reclamation has conducted planning and scheduling of major investments in infrastructure jointly with investment partners, and project selections have been based on current management priorities, established criteria, recent climate conditions, and repayment considerations. However, Reclamation is

reviewing its risk assessment approach in recognition of changing climate and extremes, particularly in the western States, where it is expected that increased frequency and intensity of floods and droughts could pose unique challenges to water-related infrastructure.

Subtotal, Facility Maintenance & Rehabilitation

1,500,000

Reclamation Request

\$61,494,000

FY 2017 Central Valley Project Restoration Fund (\$ in thousands)

					FY	2017			
Project	FY 2016 Enacted	Water & Energy	Land Management	Fish & Wildlife	Facility Operations	Facility Maintenance	FY 2017 President's Budget	Other Fed./ Non-Fed.	Total Program
Miscellaneous Project Programs	23,341			30,606			30,606	0	30,606
Anadromous Fish Restoration Program	8,441			4,900			4,900	0	4,900
Other Central Valley Project Impacts	1,500			1,500			1,500	0	1,500
Dedicated Project Yield	400			500			500	0	500
Refuge Wheeling	9,100			16,000			16,000	0	16,000
Refuge Water Supply, Facility Construction	3,300			7,106			7,106	0	7,106
Ecosystem/Water Systems Operations Model	600			600			600	0	600
San Joaquin Division	13,587			2,300			2,300	0	2,300
Water Acquisition Program	13,587			2,000			2,000	0	2,000
Water Acquisition-Instream Flows	0			300			300	0	300
Trinity River Division	1,500			1,500			1,500	0	1,500
Trinity River Restoration	1,500			1,500			1,500		1,500
San Joaquin River Restoration Program	2,000			2,000			2,000	0	2,000
Subtotal-F/WL Resources Habitat	40,428			36,406			36,406	0	36,406
Shasta Division	700			3,700			3,700	0	3,700
Clear Creek Restoration	700			3,700			3,700	0	3,700
Miscellaneous Project Programs	8,400			15,500			15,500	0	15,500
CVPIA Administrative Expense	1,500			1,500			2,000	0	2,000
Restoration of Riparian Habitat and Spawning Gravel	3,400			5,000			5,000	0	5,000
Comprehensive Assessment/Monitoring Program	1,000			6,000			6,000	0	6,000
Anadromous Fish Screen Program (AFSP)	2,500			3,000			2,500	0	2,500
Subtotal-F/WL Resources Management	9,100			19,200			19,200	0	19,200
TOTAL - CVP RESTORATION FUND	49,528			55,606			55,606	0	55,606

Note: Does not include funding from Water and Related Resources.

Central Valley Project Restoration Fund

The Central Valley Project Restoration Fund (CVPRF) was authorized in the Reclamation Projects Authorization and Adjustments Act of 1992 (Act), Title XXXIV of P.L. 102-575, October 30, 1992. The purpose of the Central Valley Project Improvement Act (CVPIA) is to protect, restore, and enhance fish, wildlife, and associated habitats in the Central Valley and Trinity River Basins of California and to address impacts of the Central Valley Project (CVP). Fund revenue is derived from payments by project beneficiaries and from donations.

The U.S. Fish and Wildlife Service (FWS) and Reclamation, in collaboration with State and local governments and stakeholders, develop public Annual Work Plans to ensure the efficient and effective implementation of the Act, and jointly publish an annual report that highlights significant actions taken to achieve the mandates of the CVPIA. The FY 2017 request will provide funding to assist in the protection, acquisition, restoration and enhancement of fish, wildlife, and associated habitats of the CVP, San Joaquin River and Trinity River.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Celebrating and Enhancing America's Great Outdoors

Goal: Protect America's Landscapes

Performance Measures: Number of acre feet of optimum refuge water supply delivered; number of acre feet of water provided as flow for fish habitat; percent complete of structural fish restoration actions; number of representative fish counted.

The program mitigates the impacts of the CVP by providing water, habitat, and facility improvements for fish and wildlife. These actions contribute to the following goals: double natural production of anadromous fish and optimum refuge water supply delivered. The funding to achieve these measures will be realigned based on hydrology to acquire water when most cost effective and to construct fisheries improvements when water acquisition is not cost effective. Funding for acre-feet (af) of water provided as flows for fish habitat and funding for structural fish restoration actions also contribute to the number of representative fish counted. Funding for optimum refuge water supply can contribute to af of water provided as flows for fish habitat and vice versa.

Bureau of Reclamation: Central Valley Project Improvement Act Performance Measures, Planned Accomplishments, and Budget

		Plar	President's	
CVPIA Performance Measure		Accompl	Budget ^{1/}	
	FY 2015	FY 2016	FY 2017	FY 2017
AF of optimum refuge water supply delivered	54,000	54,200	54,600	\$10,106,000
(Incremental Level 4) by water year ^{2/}	34,000	34,200	34,000	\$10,100,000
AF of water provided as flows for fish habitat ^{3/}	600,000	1,000,000	1,000,000	1,300,000
Percent complete of 105 structural fish	72%	77%	79%	16,600,000
restoration actions ^{4/}	7270	7770	1770	10,000,000
Number of representative fish counted (fish	359,613	431,780	456,780	\$23,900,000
doubling) ^{5/6/}	339,013	431,760	450,760	\$43,900,000

^{1/}The FY 2017 budget will align funding based on the South of Delta Allocation such that the Refuge Water Supply Program will reduce the acquisition of water during dry conditions when prices are high and willing sellers are scarce and instead acquire additional water supplies when per af charges are lower and opportunities to bank or store water are available. The balance of funding will support fisheries actions.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
·	Enacted	Presidents' Budget
Fish and Wildlife Management and Development	\$49,528,000	\$55,606,000
Total Program	\$49,528,000	\$55,606,000
Enacted/Request	\$49,528,000	\$55,606,000
Total Reclamation Allotment	\$49,528,000	\$55,606,000

Anticipated Receipt Allocations

	FY 2016	FY 2017
Friant Division Surcharges, 3406(c)(1) 1/	\$0	\$0
Additional Mitigation and Restoration Payments, 3407(d)	49,528,000	55,606,000
Tiered Water Charges	300,000	300,000
Municipal and Industrial (M&I) Surcharge	1,000	1,000
Total Anticipated Receipt Allocations	\$49,829,000	\$55,907,000

^{1/}Receipts from Friant Division Surcharges, 3406(c) (1) will be deposited in San Joaquin River Restoration Fund as provided for in P.L. 111-11, Title X, Section 10009(c)(1)(A).

²/Activities for optimum refuge water supply include incremental level 4 acquisition and conveyance, all of facility construction, and 25 percent of administrative costs.

^{3/}Activities to meet af of water provided as flows for fish habitat include Dedicated Project Yield (800,000 af) and Instream Flow Acquisition (up to 200,000 af). The target varies depending upon hydrology according to section 3406(b)(2) of the CVPIA. The performance measures assume that 25 percent of refuge acquisitions will simultaneously support instream flows in high refuge funding years.

^{4/} Structural fish restoration actions include all efforts for the construction components of Anadromous Fish Restoration, Clear Creek, Riparian Habitat and Spawning Gravel, and Anadromous Fish Screen programs and 25 percent of the administrative costs.

^{5/}Activities to meet the fish doubling goal include Anadromous Fish Restoration, Dedicated Yield, Instream Flow Acquisition, Clear Creek Restoration, Riparian Habitat and Spawning Gravel, Comprehensive Assessment and Monitoring, and Anadromous Fish Screen programs and 50 percent of the administrative costs.

⁶/Beginning in FY 2016, targets are reported as averages over time consistent with the science based decision making framework and the Comprehensive Assessment and Monitoring Program established by 3406(b)(16) of the Act.

CVPIA Requested Funds

Division	FY 2016 Water and Related Resources	FY 2016 Restoration Fund	FY 2017 Water and Related Resources	FY 2017 Restoration Fund
Miscellaneous Project Programs	\$35,000	\$31,741,000	\$35,000	\$46,106,000
San Joaquin Division	52,000	13,587,000	52,000	2,300,000
Shasta Division	280,000	700,000	280,000	3,700,000
Trinity River Division ^{1/}	11,911,000	1,500,000	11,780,000	1,500,000
San Joaquin River Restoration Program ^{1/}	0	2,000,000	0	2,000,000
Delta Division	1,236,0000	0	1,186,0000	0
Total	\$13,514,000	\$49,528,000	\$13,333,000	\$55,606,000

The Trinity River Division and San Joaquin River Restoration Program are included in the America's Great Outdoors (AGO) Rivers Initiative and supports AGO's objective to conserve, restore and connect people to the great outdoors.

WORK PROPOSED FOR FY 2017:

Fish and Wildlife Management and Development – Miscellaneous Project Programs, CVP (\$46,106,000)

CVPIA Administration - Funds will be used to continue ongoing program management, financial management, and data management activities by Reclamation and the Service. CVPIA's mandate spans the entire Central Valley, the Delta, and the Trinity River Basin, thereby encompassing many goals and objectives required on an annual and long-term basis. This funding supports overall management and coordination of all efforts, including annual work plans, stakeholder outreach, long-term planning, budgeting, establishing priorities, assessing program accomplishments and benefits, annual reporting to Congress, financial management, and coordination with partner agencies and stakeholders. These efforts provide for managing the CVPIA activities in an effective and accountable manner while meeting Congressional reporting requirements. Increase reflects added responsibilities for program management activities to provide coordination and oversight to the overall program. \$2,000,000

Restoration of Riparian Habitat and Spawning Gravel - Section 3406(b) (13). Funding will be used for gravel restoration and rearing habitat projects on the Upper Sacramento River downstream from Keswick Dam, on the American River below Nimbus Dam, and on the Stanislaus River below Goodwin Dam. Species to benefit include Sacramento, American and Stanislaus River Basin Chinook salmon, as well as steelhead. The public involvement and permitting phases of project planning will determine final site selection in all three rivers. Specific gravel placement activities are dependent on watershed hydrology, which modifies instream habitat. The funding will provide for staff, monitoring and analysis, and a baseline level of gravel restoration and rearing habitats on all associated rivers with the establishment of additional gravel sites on the Upper Sacramento River.

5,000,000

Central Valley Comprehensive Assessment/Monitoring Program - Section 3406(b) (16). The program will continue efforts to monitor and evaluate the progress of CVPIA actions, as well as the progress toward achieving the anadromous fish doubling goal. This information supports adaptive management of the CVPIA through the Structured Decision Making framework and anadromous fish restoration efforts. The funding will be used for program and data management at the Service and Reclamation. Projects include: preparation of an annual report documenting the progress toward the anadromous fish doubling goal; maintaining program databases; maintaining and updating the annual work plan tables; and continuing selected programmatic level monitoring activities. Funding provides the necessary assessments for operation of the CVP in coordination with the Dedicated Yield, Clear Creek Restoration, and Restoration of Riparian Habitat and Spawning Gravel Programs in addition to the information required by the Anadromous Fish Restoration Program. Increase in funding provides necessary assessments for operation of the CVP in coordination with the Dedicated Yield, Clear Creek Restoration, Restoration of Riparian Habitat and Spawning Gravel programs. Also, this program has been restructured to integrate numerous fishery program activities that were previously distributed under other CVPIA programs, but now fall under this program. 6,000,000

Anadromous Fish Screen Program (AFSP) - Section 3406(b) (21). The 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, and the Sacramento-San Joaquin Delta. All AFSP projects contribute to the primary goal defined under Section 3406(b) (1), which directs the Department of the Interior to make all reasonable efforts to double natural production of anadromous fish in Central Valley streams. The primary objective of the AFSP is to protect juvenile Chinook salmon, steelhead, and green and white sturgeon from entrainment at diversions throughout the Central Valley in California. The funding will provide staff for environmental compliance, design, and monitoring activities for a number of fish screen projects and construction funds for the screening of small diversions. The selection of these projects will be made based on AFSP prioritization criteria that include a willing applicant, cost effectiveness, biological benefits, availability of non-Federal cost-share, and ability to obtain preconstruction monitoring data.

2,500,000

Anadromous Fish Restoration Program (AFRP) - Section 3406(b) (1). The AFRP goal is to make reasonable efforts to at least double natural production of anadromous fish in Central Valley rivers and streams. AFRP will work with local watershed groups and other local partners to implement watershed restoration plans. AFRP will collaborate and provide technical assistance to large-scale restoration efforts and anadromous fish population studies on the Sacramento River and tributaries, San Joaquin River and tributaries, and in the Delta. The funding will provide for staffing, monitoring, analysis, and construction for the activities delineated in the Final Plan for the AFRP. In FY 2017, the emphasis will be on completing the post-project assessments for several construction projects, as well as data collection for scoping future construction actions. Specific construction activities are anticipated to include a spawning habitat on the Mokelumne River. Coordination efforts for Restoration of Riparian Habitat and Spawning Gravel will result in additional work on the Upper Sacramento and Stanislaus Rivers. Coordination with the Comprehensive Assessment and Monitoring Program will result in maintaining several long-term data sets and continuing assessment processes on watersheds in the Central Valley. Reduction due to realignment of activities more appropriately accounted for within the Central Valley Comprehensive Assessment/Monitoring program, as well as the realignment of funding to Clear Creek Restoration to fund the implementation of Phase 3C of the restoration project in the lower Clear Creek. 4,900,000 Habitat Restoration Program (Other CVP Impacts) - Section 3406(b) (1). Funding will be used for protection of habitats through purchase of fee title or conservation easements, restoration and management of habitats, and surveys and studies for Federally listed species impacted by the CVP. The Program will solicit for targeted research actions that coincide with high priority species recovery actions. Proposals will be solicited on www.grants.gov, and new projects will be dependent on the most current species and habitat priorities identified by the Service. It is anticipated that the majority of funds will be directed to land acquisition, with the remaining funds directed toward habitat restoration and other priority actions.

1,500,000

<u>Dedicated Project Yield</u> - Section 3406(b) (2). Funding will be used to continue efforts associated with the annual dedication and management of 800,000 af of CVP yield for the primary purpose of anadromous fish restoration as directed by the CVPIA. The program will implement upstream water management actions that benefit juvenile anadromous fish in their downstream migration, and will continually monitor fish, wildlife, and habitat conditions to assess the biological results and effectiveness of water management actions on the survival of juvenile salmon in coordination with the Comprehensive Assessment and Monitoring program.

500,000

Refuge Water Conveyance – Section 3406(d). Funding will be used for administration of conveyance agreements with non-Federal entities to convey Level 2 and incremental Level 4 water supplies through non-Federal conveyance facilities to State and Federal wildlife refuge boundaries, and to the Grassland Resource Conservation District. The program expects to convey 100 percent of Level 2 water to those refuges having full delivery capacity, and projects to convey approximately 54,600 af of acquired Incremental Level 4 water (surface, groundwater and lift pumping). Water quality monitoring at Gray Lodge Wildlife Area will continue. Increased funding will provide supplemental water supplies for refuges for critical wetland habitat supporting resident and migratory waterfowl, threatened and endangered species and wetland dependent aquatic biota. It also is needed to improve spawning and rearing habitat and increase migration in-stream flows for fall, winter and spring run Chinook salmon and steelhead in support of the AFRP.

16,000,000

<u>Refuge Water Supply, Facility Construction</u> - Section 3406(d). Funding will continue planning activities for refuge conveyance facilities, including the Gray Lodge Wildlife Area and Sutter National Wildlife Refuge. **7,106,000**

Ecosystem/Water Systems Operations Model - Section 3406(g). The purpose of this activity is to develop readily usable and broadly available models, with supporting data, to evaluate the ecologic and hydrologic effects of existing and alternative management strategies of public and private water facilities in the Sacramento, San Joaquin, and Trinity watersheds. Funding will be used to coordinate water operations and water management models, evaluate basin wide water quality modeling opportunities and constraints, develop Delta ecosystem modeling opportunities and a database framework to be integrated with a geographical information system, and evaluate basin wide integrated modeling needs. **600,000**

San Joaquin Division, CVP (\$2,300,000)

<u>Water Acquisition Program</u> - Section 3406(b)(3). The CVPIA requires acquisition of 100 percent of incremental Level 4 refuge water supplies, which is approximately 133,000 af for various wetland habitat areas within the Central Valley, and acquiring water to supplement the quantity of water dedicated under section 3406(b)(2) for fish, wildlife and habitat restoration purposes. Funding will provide staffing to acquire and manage Incremental Level 4 water supplies and flows to support the Central Valley wide fish doubling goal. Reclamation may acquire water supplies through short-term purchase agreements, purchase options, long-term water purchase agreements that require annual payments, and participation in groundwater banking or exchanges. A large percentage of this water will be acquired within the San

Joaquin Valley, where most of the wetlands are located. Sources of water will include reservoir storage acquisitions, groundwater pumping, banked groundwater, and temporary or permanent acquisitions of surface supplies by water right holders or project contractors. Some water supplies may be transferred through the Delta for use on the San Joaquin Valley refuges. This only represents the cost to acquire the water, as the delivery of incremental Level 4 water from its sources to the wetlands boundary is dependent upon funds available for the Refuge Water Supply Program's water conveyance component. 2,000,000

Water Acquisition - Instream Flows - Section 3406(b)(3). Funding will be used to acquire water to supplement the quantity of water dedicated under section 3406(b)(2) for fish, wildlife and habitat restoration purposes. Efforts will primarily focus on identifying the most effective acquisitions strategies to support the Central Valley wide fish doubling goal as described in the AFRP Section. 300,000

Shasta Division, CVP (\$3,700,000)

Clear Creek Restoration - Section 3406(b) (12). Clear Creek restoration continues to implement Chinook salmon and steelhead habitat enhancement projects through partnerships with local landowners, public and private agencies, and universities. Funding will provide for continued monitoring juvenile habitat use, spawning area mapping, juvenile habitat suitability indices, gravel quality, survivalto-emergence, fish rescue, benthic macro invertebrate sampling, water quality and water temperature. The program will implement baseline in-stream spawning gravel placement projects, and continue construction of Phase 3C of the planned channel restoration efforts. Increase in funding will be used to implement Phase 3C restoration project in lower Clear Creek. This is the final remaining large-scale channel rehabilitation site. 3,700,000

Trinity River Division, CVP (\$1,500,000)

Other CVP Impacts- Section 3406(b)(1). These funds are provided in addition to the Water and Related Resources request of \$11,780,000. Funding will be used to continue implementation of the Trinity River Restoration Program, December 2000 Record of Decision, including coarse sediment augmentation, watershed restoration, channel rehabilitation, and on-going comprehensive monitoring and assessment in support of an adaptive management program for fishery restoration. The Program's overarching goal is to restore anadromous fish populations to pre-dam levels. The funding will be used for implementation of three large scale channel rehabilitation projects along the main stem of the Trinity River. Final selection of projects is dependent on cultural resources, environmental compliance, landowner access agreements, funding and other factors. 1,500,000

San Joaquin River Restoration Program (\$2,000,000)

San Joaquin River Restoration Program – Public Law 111-11. Funding will be used to continue construction activities on Phase 1, high priority channel and structural improvements. Funds will be used to begin construction of the Mendota Pool Bypass and Fish Screen Projects that address two of the highest priority actions called for in the San Joaquin River Restoration Settlement. 2,000,000

Reclamation Request

\$55,606,000

FY 2017 San Joaquin River Restoration Fund Summary (\$ in thousands) FY 2016 FY 2017 Enacted 1/ **President's Budget** Water and Other Other Related **Discretionary** Program/Project Federal 3/ Federal $^{3/}$ Fund Resources Administration and Program Management 2/ 4,147 0 4,726 12,396 8,508 Flow Related Activities 0 Conservation Strategy and Flow-related Mitigation Measures 348 Flow Management and Monitoring 510 Seepage Actions 7,650 Levee Stability Actions Phase I Projects: 2,000 3,593 2,000 19,661 3,443 2,000 Mendota Pool Bypass and Fish Screen 2.000 19,411 Reach 2B and Chowchilla Bypass Structure Improvements Reach 4B/ESB/MB Channel and Structural Improvements 0 250 100 Arroyo Canal Fish Screen and Sack Dam Fish Passage 50 Salt and Mud Slough Seasonal Barriers **Phase II Projects:** Reach 4B/ESB High Flow Routing & San Slough Control Structure Chowchilla Bifurcation Structure Fish Passage Gravel Pit Filing and/or Isolation 1.653 Fisheries Reintroduction Activities 0 1.895 Paragraph 12 Activities Paragraph 16 Activities, Restoration Flow Guidelines, and RWA 1,700 1,200 Friant-Kern and Madera Canal Capacity Restoration 100 11,466 Reverse Flow Facilities 0 Part III - Financial Assistance 45 10 **Total San Joaquin River Restoration** 35,000 2,000 36,000 2,100

^{1/}Additional detail provided for FY 2017. "--" denotes where this detail was not available for the FY 2016 budget.

^{2/} Includes Program-wide activities including funding for Reclamation program-related activities, USFWS funding, NMFS funding, and program-wide public outreach.

³ Other Federal includes funding from the San Joaquin River Restoration Fund (Mandatory) and the Central Valley Project Restoration Fund.

San Joaquin River Restoration Fund

LOCATION: San Joaquin River, Fresno, Merced and Madera counties, California

DESCRIPTION/JUSTIFICATION: A Settlement was reached after 18 years of litigation of the lawsuit known as *NRDC*, *et al. v. Kirk Rodgers*, *et al.* In 1988, a coalition of environmental groups, led by the Natural Resources Defense Council (NRDC), filed a lawsuit challenging the renewal of the long-term water service contracts between the United States and the Central Valley Project, Friant Division contractors. On September 13, 2006, the Settling Parties agreed on the terms and conditions of the Settlement, which was subsequently approved by the U.S. Eastern District Court of California on October 23, 2006. The Settlement establishes two primary goals:

- To restore and maintain fish populations in "good condition" in the main stem of the San Joaquin River below Friant Dam to the confluence of the Merced River, including naturally reproducing and self-sustaining populations of salmon and other fish (Restoration Goal); and
- To reduce or avoid adverse water supply impacts to all of the Friant Division long-term contractors that may result from the Interim Flows and Restoration Flows provided for in the Settlement (Water Management Goal).

The Settlement calls for a variety of physical improvements within and near the San Joaquin River, and within the service areas of the Friant Division long-term contractors to achieve the Restoration and Water Management goals.

Section 10009(c) of the San Joaquin River Restoration Settlement Act (Act) (Title X, Subtitle A, Part I of P.L 111-11) created the San Joaquin River Restoration Fund (Fund). Deposits to the Fund include the Friant Division Surcharges, Capital Component, Water Sale Proceeds, and other non-Federal funds. Section 10009(c)(2) of the Act authorized all funds deposited into the Fund for appropriation, except that \$88 million of such funds are available for expenditure without further appropriation. After October 1, 2019, all funds shall be available for expenditure without further appropriation. The current schedule will exhaust the appropriation of \$88 million in FY 2018 and absent legislative action, additional funds in the Fund will not be available until October 1, 2019.

Revised Framework for Implementation: Reclamation, in coordination with the other Federal and State agencies implementing the Settlement, the parties to the Settlement, and downstream landowners and water districts potentially impacted by the Settlement, recently completed an updated schedule and budget for the implementation of the San Joaquin River Restoration Program (Program), called the 2015 Revised Framework for Implementation (Revised Framework). The efforts proposed below are those identified for FY 2017 in the Revised Framework. Some activities from the Revised Framework have been adjusted to work within the discretionary funding request.

AUTHORIZATION: San Joaquin River Restoration Settlement Act (Act), Title X of P.L. 111-11, Omnibus Public Land Management Act of 2009, March 30, 2009.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
·	Enacted	President's Budget
Fish and Wildlife Management and Development 1/	\$35,000,000	\$36,000,000
Enacted/Request	\$35,000,000	\$36,000,000
Other Federal ^{2/}	2,000,000	2,100,000
Prior Year Funds	56,326	0
Total Program	\$37,056,326	\$38,100,000
Prior Year Funds/Other Federal	(2,056,326)	(2,100,000)
Total Reclamation Allotment	\$35,000,000	\$36,000,000

¹/ FY 2016 funds are appropriated from the Water and Related Resources account.

WORK PROPOSED FOR FY 2017:

Administration and Program Management – Request includes funds for Program management actions, including providing funds for the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to participate in the Program. \$4,726,000

Flow Related Activities -

Conservation Strategy and Flow-related Mitigation Measures – The request includes \$106,000 to continue the activities of the Channel Capacity Advisory group and the annual determination of then-existing channel capacity, as well as \$242,000 for steelhead monitoring as required in the Program's Biological Opinion. \$348,000

Flow Management and Monitoring – The request includes the following: \$82,000 for daily flow management and monitoring activities; \$218,000 for stream gaging and replacement of gaging equipment; \$38,000 to manage Unreleased Restoration Flows; \$133,000 for data management, and; \$39,000 to prepare the Program's annual report to the State Water Resources Control Board on the Program's compliance with the conditions in Reclamation's water right orders.

510,000

Seepage Actions – The request includes funds to continue to implement a comprehensive groundwater seepage management and monitoring program, including implementation of seepage management actions and projects to protect adjacent landowners. The Program is focusing on addressing seepage concerns to allow for up to 1,300 cubic feet per second capacity in all reaches of the river and bypass system. Reclamation has begun working with all of the landowners that may be impacted by the flow and anticipates implementing physical projects or reality actions, in coordination with the landowner, as designs and appraisals are completed.

7,650,000

Subtotal, Flow Related Activities

8,508,000

Phase I Projects -

Mendota Pool Bypass and Fish Screen – Request includes funds to begin construction of the Mendota Pool Bypass. It is expected that the Central Valley Project Restoration Fund will contribute \$2,000,000 towards this effort. The Mendota Pool Bypass implements one of the highest priority projects identified in the Settlement, and includes the creation of a bypass channel around the Mendota Pool to prevent fish entrainment in the pool's water diversion facilities. The bypass channel will be designed and constructed in a way that allows for the Secretary of the Interior to make deliveries of San Joaquin River water to the

² Other Federal includes funding from the San Joaquin River Restoration Fund (Mandatory) and the Central Valley Project Restoration Fund.

Mendota Pool, when necessary. The Mendota Pool is a key point for irrigation water distribution on the San Joaquin Valley. The total estimated cost of the Mendota Pool Bypass is \$137,000,000. The \$21,411,000 in FY 17 will be used to award and fully fund the construction contract for the Columbia Canal Siphon award and partially fund the earth work construction contract. 21,411,000

Other Federal (2,000,000)

Reach 4B, Eastside Bypass and Mariposa Bypass Channel and Structural Improvements Project – Request includes funds for staff time to continue to manage and direct efforts on the Reach 4B, Eastside and Mariposa Bypass Channel and Structural Improvements Project, including continued planning, environmental compliance, and design efforts. This project implements five of the highest priority projects identified in the Settlement.

Subtotal, Phase I Projects

19,661,000

19,411,000

Fisheries Re-Introduction Activities – Fish reintroduction actions planned for FY 2017 include continued operations and maintenance of the Program's Salmon Conservation and Research Facility; donor stock collection; trapping and hauling of salmon around passage barriers; monitoring genetics of the Program's salmon population; and continued implementation of actions to segregate spring-run and fall-run Chinook salmon and prevent interbreeding of the two runs. **1,895,000**

Recapture, Recirculation, Restoration Flow Guidelines, and Recovered Water Account – Request includes funds for staff time to continue to monitor and facilitate water recapture and recirculation opportunities, implement the Restoration Flow Guidelines, and to manage the Recovered Water Account. **1,200,000**

Friant-Kern and Madera Canal Capacity Restoration Projects – Request includes funds for staff time to oversee the continued construction activities for the Friant-Kern and Madera Canal Capacity Restoration projects. This activity is expected to be resourced with mandatory funds. These two projects will restore the capacity of the Friant-Kern Canal and Madera Canal to the previous design and construction capacity, thereby providing additional capacity for the Friant Division long-term contractors to make better use of water supplies.

Other Federal (100,000)
0

Financial Assistance for Local Groundwater Banking Project – Request includes funds for staff time to continue to oversee grants for local groundwater banking project intended to reduce, avoid, or offset the water supply impacts to the Friant Division long-term contractors caused by the Interim and Restoration Flow releases that will occur under the Settlement.

Reclamation Discretionary Fund Request

\$36,000,000

		FY 2016	FY 2017
Activity	Program/Project	Enacted	President's Budget
Renewed Federal State Partnership:		1,700	2,20
	Program Management, Oversight and Coordination	1,700	2,20
Smarter Water Supply and Use:		7,200	5,30
	Water Conservation Projects	3,500	3,00
	Los Vaqueros Expansion Feasibility Study	100	12
	Upper San Joaquin River Basin Storage Feasibility Study 1/	1,000	10
	North-of-the-Delta Offstream Storage (Sites Reservoir) Feasibility Study	100	50
	Shasta Enlargement Feasibility Study 1/	500	8
	San Luis Lowpoint Feasibility Study	2,000	1,50
Address Degraded Bay-Delta Ecosystem:		28,100	28,50
	California Water Fix (Formerly Bay Delta Conservation Plan)	4,000	3,00
	Yolo Bypass Salmonid Habitat Restoration and Fish Passage/EcoRestore	2,500	4,60
	Interagency Ecological Program	6,000	6,00
	CALFED Science Activities (Pelagic Organism Decline)	5,350	5,35
	Federal Science Task Force Studies	5,700	4,00
	San Joaquin River Salinity Management	3,800	3,80
	Program to Meet Standards	750	75
	Battle Creek Salmon and Steelhead Restoration Project	1	1,00

¹/As referenced in the California Bay-Delta document, funding will be for post feasibility activities.

California Bay-Delta Restoration

LOCATION: San Francisco Bay/Sacramento-San Joaquin Rivers Delta in Central California.

DESCRIPTION/JUSTIFICATION:

The Sacramento–San Joaquin River Delta (Delta) is an integral part of an ecosystem dependent on more than 750 wildlife species and more than 120 species of fish. As a migratory corridor, the Delta hosts two-thirds of the State's salmon, and nearly half of the waterfowl and shorebirds along the Pacific flyway. The Delta spans five counties and is home to more than 500,000 people.

The Delta is also a highly modified place. The levees that were built 100 years ago transformed the Delta from marshlands into dry "islands." There are now over 1,300 miles of levees in the Delta and Suisun Marsh. Over years of intensive agriculture, peat soils from some of those islands have subsided, leaving bowls of lands that are – in some places – 30 feet below the crests of the levees that protect them.

With most of the State's precipitation falling in the north while the majority of its population resides in the south, the Delta also sits at the crossroads of California's vast water supply and delivery infrastructure. The two major water projects, the Central Valley Project (CVP) and California's State Water Project (SWP), operate in a coordinated fashion to store water in major reservoirs upstream of the Delta and then release that water into the Sacramento and San Joaquin rivers. Once the water reaches the Delta, it is drawn towards pumps located in the south Delta and exported via the State's California Aqueduct and the Federal Delta-Mendota Canal. These two projects provide a significant part of the water supply for two thirds of California's population and three million acres of irrigated agricultural land in central and southern California.

The CALFED Bay-Delta Program was established in 1995 to develop a comprehensive Long-Term Coordination Plan to address the complex and interrelated problems in the Delta region, tributary watersheds, and delivery areas. The Program's focus is on conserving and restoring the health of the ecosystem and improving water management (e.g., water supply and reliability through storage and conveyance; water quality for drinking, fisheries, and other environmental purposes; and ensure integrity of levees for water conveyance and flood protection). Lead CALFED agencies released the final Programmatic Environmental Impact Statement/Environmental Impact Report and Preferred Alternative on July 21, 2000, followed by the Record of Decision on August 28, 2000.

On October 25, 2004 the President signed Title I of Public Law (P.L.) 108-361, the CALFED Bay-Delta Authorization Act (Act). The Act authorized multiple federal agencies to participate in the implementation of the CALFED Bay-Delta Program as outlined in the August 28, 2000 Record of Decision (ROD) for the CALFED Bay-Delta Program Programmatic Environmental Impact Statement and Report. The legislation authorized and directed the implementing agencies to undertake a set of broadly described programmatic actions identified in the ROD to the extent authorized under existing law. In addition, the Act authorized the appropriation of \$389 million for new and expanded authorities to carry out programs that are components of the CALFED Bay-Delta Program.

On December 22, 2009, six Federal agencies – the Department of the Interior (DOI), Department of Commerce, Department of Agriculture, Department of the Army, U.S. Environmental Protection Agency, and the Council on Environmental Quality – released the Interim Federal Action Plan (IFAP) for the California Bay-Delta. With this IFAP, the Federal agencies are describing in a single document a variety of Federal actions and investments that the Administration is undertaking in a coordinated fashion to help address California's current water supply and ecological crises. In December 2010, the six Federal agencies released the IFAP Status Update for the California Bay-Delta: 2011 and Beyond. This request supports actions identified in these documents.

More information on the Program is available in the Administration's *California Bay-Delta Federal Budget Crosscut* posted on the website of the Office of Management and Budget: https://www.whitehouse.gov/omb/legislative reports.

APPROPRIATION CEILING: Appropriations authorized are \$389 million (October, 2004) for new and expanded authorities. The comparable Federal obligation through FY 2017 is \$51.3 million. Appropriate congressional committees will be advised of the ceiling status for this program as necessary.

Newly authorized activities in the Bay-Delta Act included:

- \$184 million for Conveyance Program activities, including new feasibility studies, water purchases, and implementation authority. Reclamation's Federal obligation is \$25.2 million.
- \$90 million for implementation of the Environmental Water Account. Reclamation's Federal obligation is \$8.5 million.
- \$90 million for implementation of levee reconstruction activities in the Delta, through the Secretary of the Army.
- \$25 million for oversight and coordination of the Program. Reclamation's Federal obligation is \$17.6 million.

New and expanded authorities authorized by P.L. 108-361 expire September 30, 2017. Appropriation language is proposed in the FY 2017 President's Budget to extend the expiration date for the expiring authorities and appropriations to September 30, 2018.

AUTHORIZATION: The Reclamation Act of 1902, as amended and supplemented, June 17, 1902; P.L. 85-624, Fish and Wildlife Coordination Act, August 12, 1958; P.L. 89-561, Feasibility Studies, September 7, 1966; P.L. 96-375, Feasibility Studies, October 3, 1980; Reclamation Projects Authorization and Adjustments Act of 1992, Titles XVI and XXXIV of P.L. 102-575, October 30, 1992; the Omnibus Parks and Public Lands Management Act of 1996, P.L. 104-333, Title XI, California Bay-Delta Environmental Enhancement Act, November 12, 1996; P.L. 108-7, Consolidated Appropriations Resolution, 2003, February 20, 2003; P.L. 108-137, Energy and Water Development Appropriations Act, 2004, December 1, 2003; P.L. 108-361, CALFED Bay-Delta Authorization Act, October 25, 2004; P.L. 111-11, Omnibus Public Land Management Act of 2009, Section 9504, Water Management Improvement, March 30, 2009; P.L. 111-85, Energy and Water Development and Related Agencies Appropriations Act, October 28, 2009; P.L. 113-76, Consolidated Appropriations Act, 2014, January 17, 2014; P.L. 113-235, Consolidated and Further Continuing Appropriations Act, 2015, December 16, 2014; and Consolidated Appropriations Act, 2016, December 18, 2015.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies **Goals:** Manage Water and Watersheds for the 21st Century; Extend the Supply of Water through Conservation

Performance Measures: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating; Acre feet of water conservation capacity enabled through Reclamation's Priority Goal conservation programs

Performance Improvement

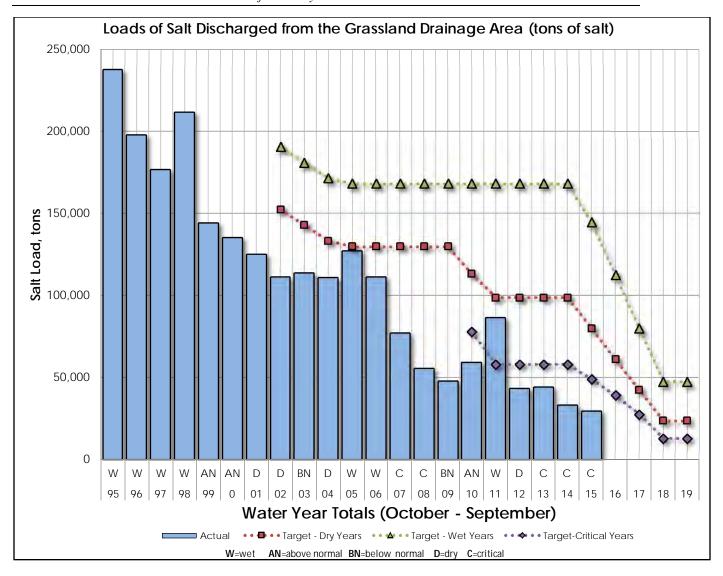
Title I, Section 103 (d) (2) (D) of P.L. 108-361 directs the Secretary of the Interior to develop and implement a program to meet regulatory water quality standards imposed on the CVP. The principal actions to achieve this objective are included in the Westside Regional Drainage Plan (WRDP). When fully implemented, the WRDP will provide the infrastructure to eliminate agricultural discharge to the San Joaquin River from drainage impaired lands within the Grasslands Drainage Area (GDA) by fully recycling, reusing and treating discharges within the GDA. In 2009, Reclamation executed an agreement with the San Luis and Delta-Mendota Water Authority that will continue

Use of Performance Improvement

The following Best Management Practices have been identified through the Westside Regional Drainage Plan to increase the ability to limit salt loading into the San Joaquin River.

- Conversion to water efficient irrigation
- Groundwater management
- Recycling
- Blending
- Drainage re-use
- Treatment technology

the Grassland Bypass Project (GBP) through 2019, an important component of the WRDP. In support of the GBP, both the Regional Water Quality Control Board and State Water Resources Control Board adopted and approved a Basin Plan Amendment to extend the 2010 deadline for compliance with selenium objectives to 2019. The GBP has significantly reduced the volume of selenium and salts 'discharged from the GDA to the San Joaquin River and Delta. Scheduled actions through 2019 will provide additional capacity to permanently reduce a total of about 180,000 tons of salt per year previously discharged to the river. During the 2015 water year (October 2014 through September 2015), Grassland Area farmers successfully eliminated discharges of agricultural drainage water from the GDA to the San Joaquin River through displacement to the San Joaquin River Improvement Project (SJRIP), a component of the stakeholder designed WRDP. Reclamation provided financial assistance worth \$3.8 million to support construction of SJRIP facilities. Approximately 216,230 acre-feet of drainage water, containing 1,135,800 tons of salts and 41,700 pounds of selenium, have been displaced to the SJRIP. Reclamation and the San Luis and Delta-Mendota Water Authority continued to implement the GBP in accordance with the 2009 Agreement for Continued Use of the San Luis Drain and Waste Discharge Requirements issued by the Regional Water Quality Control Board in July 2015. The Interagency Data Collection and Review Team completed the draft 2012-2014 Grassland Bypass Project Annual Report and the revised monitoring program. The Annual Report will be published online by the San Francisco Estuary Institute: http://www.sfei.org/gbp.



SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016	FY 2017
· ·	Enacted	President's Budget
California Bay-Delta Restoration	\$37,000,000	\$36,000,000
Total Program	\$37,000,000	\$36,000,000
Enacted/Request	\$37,000,000	\$36,000,000
Total Reclamation Allotment	\$37,000,000	\$36,000,000

Los Vaqueros Expansion Feasibility Study Phase II

Investigation Costs: Initiation: FY 2015 Completion: FY 2017

	Total Estimated Cost	Total Obligated to 9/30/15	FY 2016 ^{3/}	FY 2017	Balance to Complete
Reclamation 1/	\$4,746,295	\$2,061,295	\$100,000	\$120,000	\$2,465,000
Non-Federal ^{2/}	3,500,000	0	0	0	3,500,000
Total	\$8,246,295	\$2,061,295	\$100,000	\$120,000	\$5,965,000

Ontra Costa Water District completed a 60 TAF reservoir expansion in 2012 pursuant to the CALFED ROD. Phase II is a feasibility study to further expand the reservoir up to 275 TAF.

North-of-the-Delta Offstream Storage (aka: Sites Reservoir) Feasibility Study

Investigation Costs: Initiation: FY 2002 Completion: FY 2017

	Total Estimated Cost ^{3/}	Total Obligated to 9/30/15	FY 2016 ^{4/}	FY 2017	Balance to Complete
Reclamation 1/	\$14,703,000	\$13,133,000	\$100,000	\$500,000	\$970,000
Non-Federal ^{2/}	45,379,999	42,379,999	0	0	3,000,000
Total	\$60,082,999	\$55,512,999	\$100,000	\$500,000	\$3,970,000

^{1/} Funds were provided in FY 2002 through FY 2005 within the CVP, W&RR appropriation.

INTERIM FEDERAL ACTION PLAN FUNCTIONAL AREAS/PROGRAMS AND PROJECTS PROPOSED WORK FOR 2017:

Renewed Federal State Partnership -

Program Management, Oversight, and Coordination - Continues support for Reclamation's administration of storage, conveyance, water use efficiency, ecosystem restoration, science, and water quality. Consistent with P.L. 108-361, activities will also include: (1) Program support; (2) Program-wide tracking of schedules, finances, and performance; (3) oversight and coordination of Program activities to ensure Program balance and integration; (4) development of interagency cross-cut budgets; (5) 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.); and (6) development of annual reports. Increase reflects added responsibilities for program management activities to provide coordination and oversight to the overall program

\$2,200,000

²/ Non-Federal funding may be in the form of in-kind services from the State and local partners/beneficiaries.

^{3/} In FY 2016, Reclamation plans to reprioritize 2016 funding and utilize prior year funding to increase obligations for the Los Vaqueros Expansion Feasibility Study Phase II. This will be done to ensure completion of the study in FY 2017.

² Non-Federal funding may be in the form of in-kind services from the State and local partners/beneficiaries.

^{3/} TEC increased due to a signed cost-sharing agreement on July 14, 2015, with Sites JPA to continue work on the feasibility study.

^{4/} In FY 2016, Reclamation plans to reprioritize 2016 funding and utilize prior year funding to increase obligations for North-of-the-Delta Offstream Storage Feasibility Study. This will be done to ensure completion of the study in FY 2017.

Smarter Water Supply and Use -

Water Conservation Projects - Continues providing cost-share financial assistance to implement water conservation projects through a competitive process that will focus on achieving the goals of the Bay-Delta Act. Provides funding for the Water Management Plan and Annual Update reviews as well as direct technical assistance to water agencies. Water conservation can reduce the demand for Bay-Delta water and can result in significant benefits to water quality, water supply reliability, and in-stream flows. Examples of conservation projects include irrigation system evaluations, system retrofits and upgrades, installation of water measurement devices, canal lining and piping, leak detection, and canal delivery system automation.

3,000,000

San Luis Lowpoint Feasibility - Continues a feasibility study in coordination with the Santa Clara Valley Water District and other cooperating agencies of potential actions. The study is intended to focus on increasing the operational flexibility of storage in the San Luis Reservoir while ensuring a high quality, reliable water supply for CVP, San Felipe Division contractors. Funding will be used to conduct planning, engineering, environmental, economic, financial and related feasibility studies. Funding will also be used to prepare and process a Draft Feasibility Report and a joint Environmental Impact Statement and Environmental Impact Report for required technical, legal, and managerial review, as well as to continue stakeholder coordination and public involvement and outreach.

Address Degraded Bay-Delta Ecosystem -

California Water Fix (formerly Bay Delta Conservation Plan) - Continue activities associated with California Water Fix legal and permitting requirements including compliance with the Endangered Species Act (ESA), National Environmental Policy Act (NEPA), Clean Water Act, and National Historic Preservation Act. Continues work on the Program's Adaptive Management and Monitoring element and operation plan.

3,000,000

Yolo Bypass Salmonid Habitat Restoration and Fish Passage -

Interagency Ecological Program (IEP) - Continues funding for monitoring of physical, chemical, and biological properties of the Sacramento-San Joaquin Delta and San Francisco Bay Estuary. This monitoring satisfies conditions stipulated in the joint Federal-State water export permit (State Water Resource Control Board's D-1641 and D-1485), and requirements in the 2008 and 2009 Biological Opinions for the Coordinated

Opinions for the Coordinated

Monitoring efforts target factors that are critical to listed species to include delta smelt, longfin smelt, winter-run Chinook salmon, late-fall-run Chinook salmon, spring-run Chinook salmon, steelhead, and green sturgeon. Through this monitoring, Reclamation assesses the health of these ESA species, develops hypothesis to help resolve the ESA issues constraining Reclamation's water operations, and informs real time water operations and management decisions.

6,000,000

Pelagic Organism Decline (POD) - Continues investigation by the IEP agencies and the Delta Science Program into the causes of the POD, which include ESA listed species. The pelagic fish are still at low numbers. The POD program elements encompass investigations of multiple factors that might have contributed to the POD, including: food web structure and function; the roles of toxic agricultural chemicals and wastewater ammonia; water project operations; non-indigenous species effects; and historical changes in habitat quality and availability. Studies in FY 2017 will continue to focus on development of management strategies to increase size and recruitment of affected pelagic fish populations. This work includes analysis of alternative water project operational strategies, strategies to reduce toxic effects, and possible approaches to improving pelagic fish habitat and trophic support (food supply). Funding will also support independent peer review of the POD program to ensure all program elements are of the highest possible scientific quality and integrity.

5,350,000

Federal Science Task Force Studies - Continues monitoring and research activities designed to respond to the recommendations of a National Academy of Sciences review of the scientific basis of the 2008 and 2009 BiOps for the Coordinated

The monitoring and research performed is in coordination with other local, State, and Federal agencies to develop and test alternative ways of protecting ESA species from entrainment by the pumps at the CVP and SWP. These activities include: development of life cycle models for delta smelt and winter-, spring- and fall-run Chinook salmon to determine which life stage/s are the most critical to the species and why; survival studies for Chinook salmon and steelhead to determine causes and locations of high mortality to the species; continuous Delta-wide monitoring of flow and turbidity for use in the models and for calibrating and validating a suspended sediment dynamics model; and a study to determine how changes in turbidity and other physical processes affect the migration and distribution of delta smelt during the wet season to better determine the risk of entrainment to the species and increase operational (export) flexibility.

4,000,000

rogram To Meet Standards (PTMS) - Pursuant to P.L. 108-361, Reclamation is implementing a number of actions that will assist in meeting the water quality standards and objectives that affect the CVP operations in the Delta and San Joaquin River areas. These actions include Best Management Practices plans for wildlife refuges receiving Federal water and discharge to the San Joaquin River, real-time water quality monitoring and modeling studies to better match discharges with assimilative capacity in the San Joaquin River, supporting the efforts of the Management Agency Agreement, and studying the fate and transport of salts in the west side of the San Joaquin Valley. In addition, PTMS is focused on

long-term strategic solutions and potential new regulation of San Joaquin salinity, actively participating in the stakeholder driven development of a salinity and nutrient management plan for the Central Valley, and the development of upstream water quality objectives for salt and boron.

750,000

Battle Creek Salmon and Steelhead Restoration Project - Battle Creek, a tributary to the Sacramento River, is being restored through the Battle Creek Restoration Project - one of the largest cold-water anadromous fish restoration efforts in North America. The project is restoring approximately 42 miles of habitat on Battle Creek, and an additional 6 miles of habitat on tributaries to Battle Creek, for threatened and endangered Chinook salmon and Central Valley steelhead through the modification of Battle Creek Hydroelectric Project facilities. The project involves the removal of five diversion dams, the placement of screens and ladders on three other diversion dams, the construction of a fish barrier weir (to protect an upstream trout hatchery), an increase to instream flows, dedication of water rights for instream purposes at dam removal sites, the prevention of mixing Battle Creek North Fork and South Fork waters, and the implementation of adaptive management. To date, a diversion dam and canal/pipeline system has been removed, fish screens and fish ladders have been installed on two diversion dams, an approximate one mile long bypass and tailrace connector has been constructed, and a fish barrier weir has been constructed, resulting in about 16 miles of stream habitat restoration.

Reclamation received direction to implement the Battle Creek Restoration Project through a Secretarial delegation letter dated February 11, 1999. Since then, Reclamation has carried out project management responsibilities for the completion of design, environmental compliance, procurement and administration of construction contracts, environmental mitigation, monitoring and reporting during and after construction, and related project actions in general accordance with the terms and conditions of a 1999 Memorandum of Understanding between Pacific Gas and Electric Company, Reclamation, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Game (now California Department of Fish and Wildlife). Funding will be used to support construction of the final project phase.

Reclamation Request

\$36,000,000

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INDIAN WATER RIGHTS SETTLEMENT PROJECTS AND PROGRAMS MAP KEY

- 1. Aamodt Litigation Settlement Act
- 2. Crow Tribe Water Rights Settlement Act of 2010
- 3. Navajo-Gallup Water Supply Project
- 4. Taos Pueblo Indian Water Rights Settlement Act
- White Mountain Apache Tribe Water Rights Quantification Act of 2010

FY 2017 Indian Water Rights Settlements Budget Summary

(\$ in thousands)

		FY 2017							
	FY 2016	Water &	Land	Fish &	Facility	Facility	FY 2017	Other Fed/	Total
Projects and Programs	Enacted 1/	Energy	Mgmt.	Wildlife	Operations	Maint.	Budget	Non-Fed	Program
Aamodt Litigation Settlement Act	[6,000]	6,379					6,379		6,379
Crow Tribe Water Rights Settlement Act of 2010	[12,772]	12,772					12,772		12,772
Navajo-Gallup Water Supply Project	[89,663]	77,894	7,138	1,968			87,000	2,800	89,800
Taos Pueblo Indian Water Rights Settlement Act	[4,048]						0		0
Total - Indian Water Rights Settlements	[112,483]	97,045	7,138	1,968	0	0	106,151	2,800	108,951

^{1/} In FY 2016, funding for these Indian Water Rights Settlements was provided within the Water and Related Resource appropriation account.

Indian Water Rights Settlements FY 2017 Overview

The FY 2017 Budget proposes to establish an Indian Water Rights Settlements (IWRS) account for implementation of the four water rights settlements authorized in the Claims Resolution Act (Act) of 2010. In addition to the four settlements contained in the Act (P.L. 111-291), the new account would also include funding for the implementation of the Navajo-Gallup Water Supply Project, for which mandatory funding was provided under Title VII of the Act, and appropriations are authorized by the Omnibus Public Land Management Act of 2009 (P.L. 111-11, Title X).

The Claims Resolution Act of 2010 authorized and established requirements for the four water rights settlements included in the Act, which benefit several American Indian tribes. Reclamation has statutory responsibilities under five of the Titles of the Act, providing construction and other services to provide or improve the water that will primarily benefit the White Mountain Apache Tribe (Title III, or "White Mountain Apache Tribe Water Rights Quantification Act") in Arizona; the Crow Tribe (Title IV, or "Crow Tribe Water Rights Settlement Act" in Montana; the Taos Pueblo (Title V, or "Taos Pueblo Indian Water Rights Act") in New Mexico; and the Nambe, Pojoaque, San Ildefonso, and Tesuque Pueblos (Title VI, or "Aamodt Litigation Settlement Act"), also in New Mexico. Finally, Title VII of the Act provided funding to the projects covered under Title X, Subtitle B of P.L. 111-11, "Northwestern New Mexico Rural Water Projects," of which the Navajo-Gallup Water Supply Project is mandated to be the top priority.

Each of the water settlements responds to a court case and/or mandated settlement agreement, and fulfills the Federal government's legal requirements deriving from them. Each settlement also adheres to certain fundamental tenets as set forth by Reclamation's then-Commissioner Michael Connor in testimony before the House Natural Resources Committee on September 22, 2009: "Our general policy of support for negotiations is premised on a set of general principles including that the United States participate in water settlements consistent with its responsibilities as trustee to Indians; that Indian tribes receive equivalent benefits for rights which they, and the United States as trustee, may release as part of a settlement; that Indian tribes should realize value from confirmed water rights resulting from a settlement; and that settlements are to contain appropriate cost-sharing proportionate to the benefits received by all parties benefiting from the settlement."

The four Indian water rights settlements will provide permanent water supplies and offer economic security for the tribes and pueblos described above. The agreements will build and improve reservation water systems, rehabilitate irrigation projects, construct a regional multi-pueblo water system, and codify water-sharing arrangements between Indian and neighboring communities. The Act gave the primary responsibility for constructing these water systems to the Bureau of Reclamation.

Additional responsibility for carrying out the mandates of the Act is to be shared by Reclamation and the Bureau of Indian Affairs (BIA) and/or the Office of the Special Trustee. The Act also provides various trust funds for the tribes to manage these systems and funds to develop infrastructure. BIA or the Office of the Special Trustee is responsible for managing, and oversight of, the trust funds. Reclamation is supporting the Department and working with all parties to implement these settlements.

The new account that Reclamation is proposing to establish, the Indian Water Rights Settlements account, will include both mandatory and discretionary funding for those provisions of the settlements over which it has clear jurisdictional responsibilities. The establishment of the new account will assure continuity in the construction of the authorized projects, and will highlight and enhance transparency in handling these funds.

The total budget for the Indian Water Rights Settlements in this account in 2017 is \$106.2 million. Reclamation is including \$19.2 million in 2017 for the implementation of the four settlements covered under Titles III through VI of the Act. Reclamation is also including \$87.0 million for the Navajo-Gallup Water Supply project (Title X of Public Law 111-11) in this account, in order to have major current construction funding for Reclamation's Indian Water Rights Settlements treated in the Act in a single account. Previous funding for this Navajo-Gallup project had been provided under the Water and Related Resources Account; however, since Title VII of the Act provided significant mandatory funding for the Project, we propose that both the mandatory funding and the discretionary funding provided for this project, in addition to the other four projects, be combined in the new IWRS account.

Reclamation's FY 2017 Budget for the Indian Water Rights Settlement account includes: \$6.4 million for the Aamodt (New Mexico) Settlement; \$12.8 million for the Crow (Montana) Settlement; and \$87.0 million for the Navajo-Gallup (New Mexico) Settlement. In FY 2016, Congress completed funding the required \$20.0 million for the Taos (New Mexico) Settlement; therefore no additional funding is requested for this purpose. Construction will take place over time, and annual funding requirements will vary from year to year. Per the Act, in addition to the discretionary funding included in this budget, additional mandatory funds have already been made available to Reclamation, in order to realize the deadlines mandated in the Act.

For the construction of the Rural Water System, the White Mountain Apache Tribe Water Rights Quantification Act is authorized to use the mandatory funds which were made available under the Act. The Act authorizes the further use of discretionary funds for "Cost Overruns" (section 310(a)), but Reclamation does not anticipate needing this funding at this time. Construction is projected to begin in FY 2018.

Reclamation has made and will continue to endeavor to make the difficult allocations of resources needed to meet the statutory completion deadlines of these important projects, thereby fulfilling the Federal Government's Tribal trust responsibilities. We have also initiated comprehensive reviews of the process, policies, procedures, structures, and budgetary issues surrounding Indian Water Rights Settlements. A significant long-term goal of this review is to develop an agreed-upon framework before Federal parties begin discussions with non-Federal parties about potential future settlements, and to further develop the analytic capability to support settlement negotiations.

Claims Resolution Act of 2010

<u>Title III:</u> Under P.L. 110-390, Reclamation was directed to provide a loan to the White Mountain Apache Tribe in the amount of \$9.8 million, adjusted, as appropriate, based on ordinary fluctuations in engineering cost indices applicable to the Miner Flat Project during the period beginning on October 1, 2007, and ending on the date on which the loan is provided as authorized and directed under that Act. Reclamation has entered into a P.L. 93-638 cooperative agreement contract with the Tribe to perform the Planning, Engineering, Design, and Environmental compliance for the Miner Flat Project at a cost of \$12.9 million, based on indexing from 2007. Using the funding provided under the White Mountain Apache Tribe Water Rights Quantification Act (Title III of the Act), Reclamation will continue preconstruction activities to perform the planning, engineering, design, and environmental compliance.

<u>Title IV:</u> The Crow Tribe Rights Settlement Act has two major components--Rehabilitation and Improvement of Crow Irrigation Project (CIP) under which Reclamation is to carry out such activities as are necessary to rehabilitate and improve the water diversion and delivery features of the CIP; and Design and Construction of a Municipal, Rural, & Industrial System (MR&I) under which Reclamation will plan, design, and construct the water diversion and delivery features of the MR&I System, in accordance with

agreements between the Secretary and the Tribe.

<u>Title V:</u> Taos Indian Water Rights Settlement Act funds will be used to begin the planning and design of potential Mutual-Benefit Projects and then to provide grants to non-tribal entities to minimize adverse impacts on the Pueblo's water resources by moving future non-Indian ground water pumping away from the Pueblo's Buffalo Pasture; and to implement the resolution of a dispute over the allocation of certain surface water flows between the Pueblo and non-Indian irrigation water right owners in the community of Arroyo Seco Arriba.

<u>Title VI:</u> Aamodt Litigation Settlement Act funding will be used to plan, design, and construct the Pojoaque Basin Regional Water System for the Pueblo de Nambe, Pueblo de Pojoaque, Pueblo de San Ildefonso and Pueblo de Tesuque in accordance with the Settlement Agreement, to be known as the "Regional Water System." The system will divert and distribute water to the Pueblos and to the County Water Utility, that consists of surface water diversion facilities at San Ildefonso Pueblo on the Rio Grande; and treatment, transmission, storage and distribution facilities, and well fields to support the County Distribution System and Pueblo Water Facilities required to meet water delivery requirements within the Pojoaque Basin.

<u>Title VII:</u> The Navajo-Gallup Water Supply Project will create a reliable and sustainable municipal, industrial, and domestic water supply from the San Juan River to the Navajo Nation including the Window Rock, AZ area; the city of Gallup, NM; the Navajo Agricultural Products Industry; and the southwest portion of the Jicarilla Apache Nation Reservation Funding also provides for design data collection, design, right of way acquisition, and cultural resources activities for remaining project features. For each of the fiscal years 2012 through 2014, an additional \$60 million in mandatory funding was provided by Title VII of the Act.

Indian Water Rights Settlements – Department of the Interior/Reclamation						
Settlement	State	Public Law	FY 2017 Budget			
			(\$000)			
Aamodt	New Mexico	P.L. 111-291, Claims Resolution Act	\$6,379			
		of 2010, Dec. 8, 2010				
Crow	Montana	P.L. 111-291, Claims Resolution Act	12,772			
		of 2010, Dec. 8, 2010				
Navajo-Gallup	New Mexico	P.L. 111-291, Claims Resolution Act	87,000			
		of 2010, Dec. 8, 2010; P.L. 11-				
		291,Omnibus Public Land				
		Management Act of 2009, Mar. 30,				
		2009				
Taos	New Mexico	P.L. 111-291, Claims Resolution Act	0			
		of 2010, Dec. 8, 2010				
White Mountain	Arizona	P.L. 111-291, Claims Resolution Act	0			
Apache		of 2010, P.L. 111-291, Dec. 8, 2010				
Total:			\$106,151			

Aamodt Litigation Settlement Act

LOCATION: The project is located in the Pojoaque River Basin in north central New Mexico, north of Santa Fe.

DESCRIPTION/JUSTIFICATION: On December 8, 2010, the Claims Resolution Act of 2010 (P.L. 111-291) (Act) was signed into law. Title VI of the Act authorizes: (1) the Aamodt Litigation Settlement Agreement; (2) construction of the Pojoaque Basin Regional Water System (RWS); (3) acquisition of water rights; and (4) establishment of the Aamodt Settlement Pueblos' Fund, totaling \$62.5 million, some of which is subject to indexing. The Act authorized \$56.4 million in mandatory funding and \$50 million in appropriations for the construction of the RWS. The Act authorized the Secretary of the Interior to provide funding to accomplish specific tasks, including Operations and Maintenance (O&M) of the RWS while it is under construction. Reclamation will work in concert with Bureau of Indian Affairs to fulfill the mandates of the Act. Reclamation's portion of the funding (the "not-to-exceed" amount) is \$106.4 million (October 2006 level) to plan, design, and construct the RWS in accordance with the Settlement Agreement Act, and \$5 million for O&M of the RWS during construction. The RWS will consist of diversion works, a treatment plant, pipelines and pumping plants, and other facilities necessary to divert up to 4,000 acre-feet of water for consumptive use by the Pueblos of Nambé, Pojoaque, Tesuque, and San Ildefonso (Pueblos) and Santa Fe County. The authorized Federal cost estimate for the RWS is \$106.4 million in October 2006 dollars, subject to indexing. The RWS must be substantially complete no later than June 30, 2024, or the Settlement Agreement and Final Decree for the Aamodt litigation may become void.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902; P.L. 111-291, Claims Resolution Act of 2010, December 8, 2010, Title VI, Aamodt Litigation Settlement Act.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$6,000,000	\$6,379,000
Enacted/Request	\$6,000,000	\$6,379,000
Non-Federal	0	0
Prior Year Funds	2,649,689	0
Total Program	\$8,649,689	\$6,379,000
Prior Year Funds/Non-Federal	(2,649,689)	0
Total Reclamation Allotment	\$6,000,000	\$6,379,000

COST SHARING: The costs of constructing the County Distribution System shall be a State of New Mexico and county of Santa Fe expense pursuant to the Cost-Sharing and System Integration Agreement. **Total Cost Information***

	Total Estimated Cost ^{1/}	Total Exp to 9/30/15	FY 2016	FY 2017	Balance to Complete 1/
Reclamation	\$70,170,000	\$16,177,667	\$6,000,000	\$6,379,000	\$41,613,333
Mandatory 2/	70,929,000	202,034			70,726,966
Non-Federal	88,160,000	5,475,573			82,684,427
Total	\$229,259,000	\$21,855,274	\$6,000,000	\$6,379,000	\$195,024,726

^{*} Includes costs associated with the authorized appropriation ceiling.

Construction Cost Allocation and Methodology

Allocation	FY 2016 ^{1/}	FY 2017 ^{1/}
Municipal & Industrial Water	\$221,975,000	\$229,259,000

^{1/} As of October 2015

METHODOLOGY: Costs are allocated using the Incremental Cost Methodology per Section 3.1.1 of the August 27, 2009 Cost Share and System Integration Agreement reference in Section 602 of P.L. 111-291, Claims Resolution Act of 2010, December 8, 2010, Title VI, Aamodt Litigation Settlement Act.

APPROPRIATION CEILING: Section 611(a) of the Act authorizes the Secretary, acting through the Commissioner of Reclamation, to plan, design and construct a RWS in accordance with the Settlement Agreement to divert and distribute water to the Pueblos and to the County Water Authority in accordance with the Engineering Report. The Engineering Report is defined to be the report titled, "Pojoaque Regional Water System Engineering Report," dated September 2008, prepared by HKM Engineering for the Northern Pueblo Tributary Water Rights Association.

Section 617(a)(4) of the Act states: "[t]he amounts made available under paragraph (1) shall be adjusted annually to account for increase in construction costs since October 1, 2006, as determined using applicable engineering cost indices." Paragraph (1)(A) states that "...the Secretary of the Treasury shall transfer to the Secretary for the planning, design, and construction of the Regional Water System and the conduct of environmental compliance activities under section 616 an amount not to exceed \$56,400,000, as adjusted under paragraph (4), for the period of fiscal years 2011 through 2016, to remain available until expended." Paragraph (1)(B) states: "[i]n addition to the amount made available under subparagraph (A), there is authorized to be appropriated to the Secretary for the planning, design, and construction of the Regional Water System and the conduct of environmental compliance activities under section 616 \$50,000,000, as adjusted under paragraph (4), for the period of fiscal years 2011 through 2024."

Section 3.1.5 of the Cost Sharing and System Integration Agreement states that State and County funds shall also be indexed: "...the Regional Water System construction costs, and the cost shares of the United States and State and County set forth in Section 3.1.1, are estimates and shall be indexed and adjusted consistent with the Federal appropriations for construction costs in the Federal Legislation." The costs reflected in the above tables have been indexed as of October 2015 and October 2016. These amounts

^{1/} Indexed to October 2016

^{2/} This table shows funds as they are/will be expended. Additional mandatory funding in the amount of \$56,400,000 was appropriated in FY 2011 per the Claims Resolution Act; these amounts are shown above as they will be indexed. These mandatory funds have been received and are available for the settlement. FY 2012-2015 discretionary funding was appropriated in the Water and Related Resources account.

include both the Federal and non-Federal share of project costs.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues implementation of the demonstration aquifer storage and recovery wells to assess the ability of the aquifer to store water, over time, in a manner that allows the water to be retrieved for use in the RWS. Continues development of designs, environmental compliance, public involvement, lands planning, and engineering design data collection for the RWS, commensurate with the requirements of the authorizing legislation and the Settlement Agreement.

6,379,000

Reclamation Request

\$6,379,00

Crow Tribe Water Rights Settlement Act of 2010

LOCATION: The Crow Indian Reservation is located in south central Montana, bordered by Wyoming to the south and the Northern Cheyenne Indian Reservation to the east. The City of Billings, Montana, is approximately 10 miles northwest of the reservation boundary.

DESCRIPTION/JUSTIFICATION: The "Crow Tribe Water Rights Settlement Act of 2010" (Act), which is Title IV of the Claims Resolution Act of 2010 (P.L. 111-291), was signed into law on December 8, 2010. For Reclamation's activities under the Act, a total of \$219.8 million of mandatory funds and \$158.4 million of discretionary funds are authorized for the Crow Settlement. There are two major construction components of the Act which are the responsibility of the Bureau of Reclamation:

- 1. Rehabilitation and Improvement of the Crow Irrigation Project (CIP). The Bureau of Reclamation (Reclamation) shall carry out such activities as are necessary to rehabilitate and improve the water diversion and delivery features of the CIP, in accordance with one or more agreements between the Secretary and the Tribe. Reclamation shall serve as the lead agency. The scope of the rehabilitation and improvement shall be as generally described in the document entitled "Engineering Evaluation of Existing Conditions, Crow Agency Rehabilitation Study" prepared by DOWL HKM Engineering, dated August 2007. This was updated in a status report dated December 2009 by DOWL HKM Engineering, on the condition that prior to beginning construction activities, the Secretary of the Interior (Secretary) shall review the design of the proposed rehabilitation or improvement and perform value engineering analyses.
- 2. Design and Construction of the Municipal, Rural, & Industrial System (MR&I). Reclamation shall carry out such activities as are necessary to plan, design, and construct the water treatment and delivery features of the MR&I System, in accordance with one or more agreements between the Secretary and the Tribe. Reclamation shall serve as the lead agency. The scope of the design and construction shall be as generally described in the document entitled "Crow Indian Reservation Municipal, Rural, and Industrial Water System Engineering Report" dated July 2008. This was updated in a status report dated December 2009, on the condition that prior to beginning construction activities, the Secretary shall review the design of the proposed MR&I System and perform value engineering analyses.

AUTHORIZATION: P.L. 111-291, Title IV, Crow Tribe Water Rights Settlement Act of 2010.

COMPLETION DATA: Pursuant to the required activities found in P.L. 111-291, Section 410 (g) and (h), all appropriations must be funded by June 30, 2030 or the Crow Settlement is voided. As of September 30, 2015, the project was approximately 11percent complete for the CIP component and 2 percent complete for the MR&I component.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Extend the Supply of Water through Conservation

Performance Measure: Acre feet of water conservation capacity enabled through Reclamation's

Priority Goal conservation programs

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2016 Enacted	FY 2017 President's Request
Crow Tribe Water Rights Settlement	\$12,772,000	\$12,772,000
Request	\$12,772,000	\$12,772,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$12,772,000	\$12,772,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment 1/	\$12,772,000	\$12,772,000

^{1/} Mandatory funding in the amount of \$220.3 million was appropriated in FY 2011, per the Claims Resolution Act. FY 2012-2016 discretionary funding was appropriated in the Water and Related Resources account.

Total Cost Information*

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete
Reclamation 1/	\$190,690,000	\$27,213,000	\$12,772,000	\$12,772,000	\$137,933,000
Mandatory ^{2/3/}	221,437,957	12,658,297	4,475,000	23,565,300	180,739,360
Non-Federal	0	0	0	0	0
Total	\$412,127,957	\$39,871,297	\$17,247,000	\$36,337,300	\$318,672,360

^{*} Includes costs associated with the authorized appropriation ceiling.

Cost Allocation and Methodology

cost inocation and without orgy		
Allocation	FY 2016	FY 2017
Discretionary Funding 1/	\$158,381,000	\$190,690,000
Mandatory Funding ^{2/}	221,437,957	221,437,957
Total	\$379,818,957	\$412,127,957

¹/ Indexing methodology follows standard Reclamation procedures.

METHODOLOGY: FY 2012 was the first year any costs were incurred for the Crow Irrigation Project (CIP).

¹/ Discretionary Funding indexed using October 2015 Price Levels.

^{2/} Mandatory funding was provided to the Secretary of the Interior in FY 2011 and FY 2013. Future warrants will be requested from the Treasury to adjust the base cost of the negotiated amount from 2008 dollars to current dollars, as provided under section 414(a)(1) of P.L. 111-291.

^{3/}All mandatory funding has been received (with the exception of indexing). Balance to complete includes the unspent balance of the mandatory funds.

² Includes indexing for the FY 2011-FY 2012 CIP and FY 2013 MR&I Annual Funding Agreements. Indexing for FY 2011-FY 2012 was transferred to the Tribe in FY 2012. Indexing for FY 2013 was transferred in FY 2014, less the sequestered amount.

APPROPRIATION CEILING: P.L. 111-291 authorizes the appropriation of mandatory funding of \$219,843,000 and the appropriation of discretionary funding of \$158,381,000. Indexing on the discretionary funding totals \$32,309,000 to date. The indexed portion of the mandatory funding is disbursed directly from Treasury. To date, \$1,594,957 of indexed mandatory funds have been transferred by Treasury.

WORK PROPOSED FOR FY 2017:

Crow Tribe Water Rights Settlement – Continues the oversight activities for the planning, engineering, design, environmental compliance, and construction of the Crow Irrigation Project (CIP) components and planning, engineering, design, environmental compliance and construction of the Municipal, Rural, & Industrial Water System (MR&I). Construction will continue on components in the Willow Creek Canal and Gatetower, High Check/Drop, 40-Mile Headworks, Reno Diversion Dam, and the highest priority projects identified in the CIP Master Plan completed in FY 2014, and in the MR&I Master Plan completed in FY 2014

Reclamation Request

\$12,772,000

Navajo-Gallup Water Supply Project Colorado River Storage Participating Project

LOCATION: The project is located in New Mexico and eastern Arizona.

DESCRIPTION/JUSTIFICATION: The project was authorized for construction by P.L. 111-11, Omnibus Public Land Management Act of 2009, March 30, 2009, as a key element of the Navajo Nation Water Rights Settlement on the San Juan River in New Mexico. The project will provide reliable and sustainable municipal, industrial, and domestic water supplies from the San Juan River to 43 Chapters of the Navajo Nation including the Window Rock, AZ area; the city of Gallup, NM; the Navajo Agricultural Products Industry; and the southwest portion of the Jicarilla Apache Nation Reservation. All of these entities rely on a rapidly declining groundwater supply that is inadequate to meet present and projected needs to year 2040. Reclamation is authorized to construct, operate, and maintain a water supply system to meet these projected demands.

P.L. 111-11 authorized to be appropriated a total of \$870 million (2007 price level) to plan, design, and construct the project with a legislated period of performance of fiscal years 2009 through 2024 and specific deadlines to accomplish pre-construction and construction activities and Congressional reporting requirements. The legislation defines prerequisites for construction that include completion of the Final Environmental Impact Statement and Record of Decision, execution of a water rights settlement agreement and settlement contract with the Navajo Nation, execution of a cost share agreement with the State of New Mexico, and execution of repayment contracts with project beneficiaries. In addition, the legislation amended the Colorado River Storage Project (CRSP) Act of 1956 to include the Navajo-Gallup Water Supply Project as a participating project of the CRSP and authorized the project's use of CRSP power. All required prerequisites for construction have been completed.

P.L. 111-291 authorized that a mandatory appropriation of \$60 million, for each of fiscal years 2012 through 2014, be deposited into the Reclamation Water Settlements Fund established by P.L. 111-11, Omnibus Public Land Management Act of 2009, March 30, 2009, to provide funding not otherwise available through appropriations to be utilized to pay the Federal share of costs, and substantially complete as expeditiously as practicable, the construction of the water supply infrastructure listed under Subtitle B of Title X of P.L. 111.11. Navajo-Gallup Water Supply Project is the top priority project identified under Subtitle B of Title X of P.L. 111-11 (section 10501). Funds provided under P.L. 111-291 are to remain available until expended. Additionally, P.L. 111-11 authorizes expenditures from the fund of \$120,000,000, plus interest accrued, for each of fiscal years 2020 through 2034. Pursuant to P.L. 111-11, though Navajo-Gallup Water Supply Project is the number one priority to receive these funds, other Indian Water Rights Settlements may also be authorized to receive funds and expend them. For the Navajo-Gallup Water Supply Project, however, expenditures from the Reclamation Water Settlements Fund may not exceed \$500,000,000 for the period of fiscal years 2020 through 2029. Mandatory funding is not authorized for fiscal years 2015 through 2019.

AUTHORIZATION: P.L. 111-11, Omnibus Public Land Management Act of 2009, March 30, 2009; P.L. 111-291, Claims Resolution Act of 2010, December 8, 2010.

COMPLETION DATA: Pursuant to P.L. 111-11, required activities must be completed by December 2024.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014-2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Request
Water and Energy Management and Development	\$78,878,000	\$77,894,000
Land Management and Development	8,453,000	7,138,000
Fish and Wildlife Management and Development	2,332,000	1,968,000
Enacted/Request	\$9,663,000	\$87,000,000
Other Federal – Permanent Mandatory Authority	0	0
Non-Federal ^{1/}	2,250,000	2,800,000
Prior Year Funds	5,927,131	0
Total Program	\$97,840,131	\$89,800,000
Other Federal – Permanent Mandatory Authority	0	0
Prior Year Funds/Non-Federal	(8,177,131)	(2,800,000)
Total Reclamation Allotment	\$ 89,663,000	\$87,000,000

^{1/} Represents an estimate of contributed funds to be received from the City of Gallup and the Jicarilla Apache Nation via their respective prepayment agreements.

Total Cost Information

	Total Estimated Cost	Total to 9/30/15	FY 2016	FY 2017	Balance to Complete ^{6/}
Reclamation 1/	\$951,021,000	\$206,707,000	\$89,663,000	\$87,000,000	\$567,651,000
Other Federal – Permanent Mandatory Authority ^{2/}	180,000,000	41,479,000			138,521,000
Federal Total	1,131,021,000	248,186,000	89,663,000	87,000,000	706,172,000
Cost-Sharing ^{3/}	13,600,000				13,600,000
Other 4/	68,400,000	4,048,000	2,250,000	2,800,000	59,302,000
Total	\$1,213,021,000 ⁵ /	\$252,234,000	\$91,913,000	\$89,800,000	\$779,074,000

^{1/}This amount (plus the \$180 million of Mandatory Funds authorized by P.L. 111-291) was authorized to be appropriated pursuant to P.L. 111-11. Amount of actual appropriations is subject to change based upon the amount of funding received from the Reclamation Water Settlement Fund established in P.L. 111-11 beginning in FY2020. ^{2/}Mandatory funding authorized by P.L. 111-291.

^{3/}Represents Cost-Share received from the State of New Mexico. The remainder of the State's \$50 million cost share obligation is assumed to be in the form of a credit.

⁴ P.L. 111-11 allows for the prepayment of the repayment obligation of both the City of Gallup and the Jicarilla Apache Nation. Both entities have entered into prepayment agreements pursuant to the Contributed Funds Act and it is assumed that prepayment will continue until total repayment obligation is received.

^{5/}Reclamation funds and Mandatory (Other Federal) funds make up the total shown in the appropriation ceiling. All other funds are not subject to indexing but will increase the funds available for the project.

⁶/Balance to Complete is subject to increases to account for indexing for inflation.

COST-SHARING: Legislation requires the State of New Mexico to provide not less than \$50 million of the project construction cost (and/or receive credit for funding construction of facilities that reduces the cost of the project). Ability to pay determinations has been completed for both the Jicarilla Apache Nation and the city of Gallup. It has been determined that both entities are required to pay or re-pay 35 percent of their allocated cost of project construction.

Cost Allocation and Methodology 1/

Allocation	FY 2016	FY 2017
Total	\$1,109,212,000	\$1,131,021,000

¹/Development of the Interim Cost Allocation is in progress.

METHODOLOGY: Costs are allocated using the Use of Facilities Methodology per the July 2009, Navajo-Gallup Water Supply Project Planning Report, and Final Environmental Impact Statement referenced in P.L. 111-11.

APPROPRIATION CEILING: The appropriation ceiling at the January 2007 price level is \$870,000,000 for the period of fiscal years 2009 through 2024, to remain available until expended. The amount shall be adjusted by such amounts as may be required by reason of changes since 2007 in construction costs, as indicated by engineering cost indices applicable to the types of construction involved. The current appropriation ceiling at the October 2016 (FY2017) price level is \$1,131,021,000.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues oversight, management, coordination, and construction on the San Juan Lateral and the Cutter Lateral. Continues oversight, management, coordination of design, data collection, right-of-way acquisition, and final design for facilities targeted to begin construction in FY 2017, and beyond. Continues activities in support of compliance for the National Environmental Policy Act (NEPA) and other environmental standards (Clean Water, Clean Air Acts, management of hazardous materials, etc.) effecting project construction. The proposed funding will allow construction to continue on the San Juan lateral pipeline, from Twin Lakes to Window Rock and south of Gallup, and will enable the start of construction on additional reaches of the San Juan Lateral north of Twin Lakes, as well as allow work to continue on reaches of the Cutter Lateral. Any decrease in the discretionary funding would result in an increase to the amount of discretionary funding required in out-years. Mandatory funding (pursuant to P.L. 111-291) is available until expended, and will be utilized to supplement appropriations in FY 2017 through FY 2019. Requested funding will support scheduled construction activities necessary to complete project by legislated completion date of 2024 and preserve the available mandatory funding in FY 2017 and reduce the discretionary funding needs in FY 2018 and FY 2019.

Non-Federal (City of Gallup and Jicarilla Apache Nation) (2,800,000)

Subtotal, Water and Energy Management and Development

\$77,894,000

Land Management and Development - Continues activities in support of compliance for the National Historic Preservation Act (NHPA). Continues cultural resources consultation process with Native American Tribes pursuant to the Programmatic Agreement. Continues data recovery mitigation in advance of construction contracts and continues cultural resources monitoring work on active construction contracts.

7,138,000

Fish and Wildlife Management and Development – Continues activities in support of fish and wildlife

protection commitments associated with the Endangered Species Act (ESA), U.S. Fish and Wildlife Coordination Act, and other Federal, State, and Tribal programs. Continues fish and wildlife mitigation monitoring on Reach 22A and continues fish and wildlife mitigation planning on Reach 1. **1,968,000**

Reclamation Request

\$87,000,000

FY 2017 Direct Loan Program Budget Summary

(\$ in thousands)

		FY 2017							
Project or Study	FY 2016	Water & Energy	Land Management	Fish & Wildlife	Facility Operations	Facility Maint.	FY 2017 President's Budget	Treasury	Total Program
Rescission of Unobligated Balances	0	0	0	0	0	0	0	0	0
TOTAL LOAN PROGRAM	0	0	0	0	0	0	0	0	0

Loan Program Appropriation FY 2017 OVERVIEW

		FY 20	17 PRESID	ENT'S BUDO	GET	
FY 2016	Water & Energy	Land Management	Fish & Wildlife	Facility Operations	Facility Maintenance	Total Program
\$0	\$0	\$0	\$0	\$0	\$0	\$0

Water and Energy Management and Development- No new funding is requested in FY 2017 for the program authorized by the Small Reclamation Projects Act of 1956, P.L. 84-984. The most recent discretionary appropriation to the account was in FY 2002 for Direct Loans and FY 2004 for Loan Program Administration. Loan Program Administration costs can be accommodated using carryover funds. The Loan Administration program is used for responding to questions concerning existing loans and the status of the Loan Program.

The Loan Program currently has an outstanding loan balance of approximately \$40 million. The Fort McDowell Indian Community Water Rights Settlement Revision Act of 2006, P.L. 109-373, cancelled the Fort McDowell Yavapai Nation's obligation to repay their \$13 million loan to the United States.

POLICY AND ADMINISTRATION

LOCATION: The 17 Western States in Reclamation's Service Area and Washington, D.C.

DESCRIPTION/JUSTIFICATION: The Policy and Administration appropriation finances all of Reclamation's centralized management functions. The purpose of the appropriation is to support management and administrative activities which are not chargeable directly to a specific project or program.

Managerial support provided by this appropriation includes overall program and personnel policy management; equal employment opportunity management; worker's compensation programs; drug testing; safety, environmental, and occupational health management; budgetary policy formulation and execution; financial management policy; information technology management and telecommunication services; procurement, property, mail and messenger services; vehicle fleet management; space management and building security; transportation and shipping, receiving, and moving services; passport and visa services and general services policy; public affairs activities; and organizational and management analysis. Also included is support for the Department-wide library, museum, and news and information services and for continuing initiatives in workforce diversity, organizational streamlining, and improved workforce performance. In addition, the Policy and Administration appropriation supports Reclamation-wide priority efforts that require oversight, such as oversight and development of policy and guidance for implementation of the Government Performance and Results Act (GPRA).

Other activities funded by the Policy and Administration appropriation include: developing, reviewing, and revising technical and statistical publications; certain international and interagency activities; legal reviews and opinions; Reclamation management; managerial training; attendance at meetings of technical societies and professional groups; public involvement; review and control including the Management Control Program; special initiatives, inquiries, analyses, and activities. Certain centralized and direct Departmental assessments are paid out of Policy and Administration.

The **Office of the Commissioner** is responsible for providing policy direction on all programs within Reclamation. The Commissioner receives assistance from a Chief of Staff, located in Washington, D.C., who serves as the Commissioner's key staff in management development, program coordination, and accomplishment of Reclamation's stated mission.

The Commissioner has three Deputy Commissioners to assist with overall management of Reclamation:

The <u>Deputy Commissioner</u>, External and Intergovernmental Affairs, located in Washington, D.C., has oversight of Reclamation's Congressional and Legislative Affairs Group and Public Affairs functions, and is responsible for Reclamation's national relationships with Federal, State, and local governments, as well as citizen and other nongovernmental groups.

The <u>Deputy Commissioner</u>, <u>Operations</u>, located in Washington, D.C., with staff support located in Denver, CO, works in cooperation with the area and regional offices to provide corporate oversight of the execution of Reclamation programs and project operations. Support for the Deputy Commissioner, Operations includes the following Policy and Administration funded activities: Operations Group located in Washington, DC, which includes the International Affairs Office with staff located primarily in Washington, DC, but also staff located in Denver, CO; and the Technical Resources group, with management responsibility for the Technical Serivce Center, located in Denver, CO.

The <u>Deputy Commissioner</u>, <u>Policy</u>, <u>Administration and Budget</u>, located in Washington, D.C. provides for oversight of:

The Information Resources Office, located in Denver, CO, responsible for the management, coordination, execution, and oversight of all information technology (IT) functions and operation.

Management Services Offices, located in Denver, CO, including Finance and Accounting, Property and General Services, and Contracts and Acquisition.

Security, Safety, and Law Enforcement office, located in Denver, CO, responsible for the management of Reclamation's security and safety programs and initiatives, including the Safety of Dams Program and the Law Enforcement Program.

Program and Budget office, located in Washington, D.C., cooperating with the area and regional offices in all matters impacting Reclamation's budget, and responsible for Reclamation-wide budget formulation and execution, as well as all aspects of Government Performance and Results Act coordination of budget and performance integration.

Policy and Administration Office, located in Denver, CO, providing oversight of the corporate development and formulation of Reclamation policy; Human Resources; and Civil Rights and Equal Employment Opportunity functions.

Regional Offices – Management of Reclamation's water resources activities in the 17 Western States is carried out by five Regional Offices which are located in Sacramento, California; Boise, Idaho; Billings, Montana; Boulder City, Nevada; and Salt Lake City, Utah. The Regional Offices provide services covering policy, management, and program administration or Reclamation mission related support as follows:

Policy – Provides support of ongoing Reclamation-wide policy level formulation, guidance, and review activities. This includes support of preliminary title transfer activities; Reclamation participation in forums, conferences, councils, and similar activities related to water resource issues; refinement and implementation of GPRA; and participation in the Reclamation-wide effort to diversify the workforce.

Management – Provides direction and oversight guidance to assure adherence to Reclamation-wide policy and Federal government requirements; direction and guidance necessary to achieve Reclamation-wide program and mission accomplishment; and support for managerial development programs.

Program Administration/Mission Related Support – Continues essential overall management and direction functions of Reclamation above and beyond those chargeable to projects and program activities covered by separate funding authority. These functions include overall program management; human resources; equal employment opportunity; safety and health management; budget preparation; finance; information technology management; procurement; property and general services policy; public affairs; and organization and management analysis. Other activities funded through the Policy and Administration appropriation allow for regional participation in: activities in support of the Management Control Review program, and the revision and development of manuals and standards and technical and statistical publications. Also included are continuing efforts in special initiatives such as supporting workforce diversity, streamlining efforts, improving work performance, and support of public awareness and education programs.

Safety and Occupational Health Action Plan- Continues implementation of the safety action items identified in the Safety Action Plan and addressed by the 21 safety action teams.

AUTHORIZATION: P.L. 68-292, Second Deficiency Appropriation Act of 1924 (Fact Finders' Act), December 5, 1924; and P.L. 79-35, Amend Fact Finders' Act, April 19, 1945.

SUMMARIZED FIANANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted	President's Budget
Policy and Administration	\$59,500,000	\$59,000,000
Enacted/Request	\$59,500,000	\$59,000,000
Total Program	\$59,500,000	\$59,000,000
Total Reclamation Allotment	\$59,500,000	\$59,000,000

WORK PROPOSED FOR FY 2017: Continues support of ongoing Reclamation management and general oversight functions. This includes day-to-day Reclamation management, administrative, and policy functions necessary to ensure effective and efficient implementation, and execution of all Reclamation sponsored programs. Specific activities include, but are not limited to: personnel training and development programs; development, review, and updating of technical and statistical publications; responses to special inquiries; and the development and long-term maintenance of Reclamation's information technology program.

Reclamation Request \$59,000,000

WORKING CAPITAL FUND

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: The Reclamation Working Capital Fund (WCF) is a tool for cost collection and allocation for certain shared services, and is comprised of various activities designed to provide more efficient financing, accounting, cost recovery, management, and budgeting for support services, facilities, and equipment. The WCF is available without fiscal year limitation for expenses necessary for furnishing materials, supplies, equipment, facilities, work, and services in support of Reclamation programs. It is credited with appropriations and other funds for the purpose of providing capital. By design, the fund operates on a self-supporting basis through user charges deposited in the fund. Charges to users are to ensure full cost recovery and rates are equal to the costs of furnishing the materials, supplies, equipment, facilities, and services, including labor and related costs and future planned capital needs.

The WCF provides information technology support and investments; transportation vehicles; drilling operations; finance, human resources, and acquisition services; soil and water quality laboratories; Geographic Information Systems; underwater inspection team; heavy and mobile equipment; photogrammetry and surveys; engineering services; Departmental support assessments; and the employee leave account. ActivitesActivitesActivites not funded by the Centralized or Direct Bill discussed later include rates charged directly to users: *Drill Operations* – used for design data collection, as well as operation, maintenance and replacement of Reclamation's drill equipment.

Soil & Water Quality Laboratories – used for water quality monitoring and is also provided to assist states, Tribes, Watershed Council, and irrigation/conservation districts in watershed planning and restoration.

Geographic Information Systems (GIS) – includes the cost to provide and support the computer hardware and software system designed to collect, manage, manipulate, analyze, and display spatially-referenced data.

Underwater Inspection Team includes costs for the operation of the dive team, supplies, medical screenings and biennial training to maintain safety standards.

Heavy & Mobile Equipment – includes the operation, maintenance and replacement of heavy & and mobile equipment for use by area and field office personnel.

Photogrammetry and Surveys –includes topography digital elevation models, digital terrain models, surveys for structural behavior measurements and plot control for photogrammetry operations using conventional as well as global positioning equipment. Surveying services include structural deformation, pre-construction/construction/post-construction, hydrologic, GPS, investigation, location, right-of-way, and design data.

Bureau-wide Engineering Services – provides Reclamation and the Department of the Interior scientific, applied research, and engineering services related to water resources management support and technical support for broad areas of water and power resources management including geotechnical engineering, dam safety, civil engineering, environmental engineering, mechanical and electrical engineering, ecosystems and environmental sciences, and laboratory services.

Assessment of indirect costs:

Leave Account – This activity is used to finance paid time off for employees that includes annual leave, sick leave, administrative leave, lump sum leave, holiday, credit hours, etc. Costs are recovered through an indirect cost rate assessed to benefiting offices.

Cost share agreement:

Radio VHS System – The costs in this activity are for the system equipment for the Joint Radio System for Reclamation and Fish & and Wildlife Services (FWS). The contract states that all funds from the FWS shall be maintained in the WCF. Costs are recovered through cost share agreements between Reclamation and FWS with all funds from the FWS maintained in the WCF as specified in the contract.

Campaign to Cut Waste

Over the last several years, the Administration has implemented a series of management reforms to curb uncontrolled growth in contract spending, terminate poorly performing information technology projects, deploy state of the art fraud detection tools, focus agency leaders on achieving ambitious improvements in high priority areas, and open Government up to the public to increase accountability and accelerate innovation.

The Department is leading efforts to reduce waste and create efficiencies by reviewing projected and actual administrative spending to allocate efficiency targets for bureaus and Departmental offices to achieve the target. Additional details on the Campaign to Cut Waste can be found at http://www.whitehouse.gov/the-press-office/2011/11/09/executive-order-promoting-efficient-spending. In support of the Campaign to Cut Waste, Reclamation has reduced its overall travel expenditures, including in the Working Capital Fund, by \$3 million from the FY 2010 levels.

AUTHORIZATION: P.L. 99-141, Appropriations for Energy and Water Development for the Fiscal Year Ending September 30, 1986, Title II: Department of the Interior, November 1, 1985.

SUMMARIZED FINANCIAL DATA

Program Financial Data

1 ogram i manetar bata		
		FY 2017
	FY 2016	President's
Activity	Enacted	Budget
Revenue	\$435,132,807	\$452,442,489
Prior Year Funds	113,821,462	99,597,335
Reduction		
Unobligated Balance, End of Year*	\$(99,597,335)	\$(99,125,602)
Total Program	\$449,356,934	\$452,914,222

^{*}This represents funds needed for expenditures that are planned in future years.

Department of the Interior Assessments

Reclamation's WCF includes some support services and common services provided to Reclamation by the Department of the Interior (Department) and the Interior Business Center (IBC). Below are two lists of support services and common services assessed to Reclamation through the Department's Centralized

Billing¹ process (one for the Immediate Office of the Secretary (IOS) and one for the IBC). The activities below are included in the total revenue figures provided in the "Summarized Financial Data" table above. The list below only contains those activities provided by the Department and IBC:

Immediate Office of the Secretary's Portion of the Centralized Bill

Dollars in Thousands

Activity	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Financial and Business Management System (FBMS) Business Integration Office					
FBMS Infrastructure Hosting & Support	-	-	1,624.7	1,530.1	1,643.0
FBMS Master Data Management	181.5	222.3	219.2	-	-
Office of Budget					
Capital Planning & Investment Control (CPIC)	13.8	16.9	16.2	16.4	16.6
Office of Financial Management					
Travel Management Center	15.1	16.8	14.3	17.9	17,300.0
Office of Property and Acquisition Management					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Interior Collections Management System (ICMS)	46.5	47.2	46.7	46.8	47.4
Interior Asset Disposal System O&M	-	_	5.0	5.1	5.1
DOT Relocation Technical Assistance	7.1	-	7.0	7.2	7.1
DOI University					
DOI University Management	49.4	49.0	48.6	49.5	51.3
Department-wide Training Programs (Includes Online Learning)	148.4	195.4	138.1	138.0	140.8
Learning & Performance Management Centers (Formerly Albuquerque, Denver, and					
Washington)	_	64.6	160.4	161.2	199.0
Telecommunications Services					
Enterprise Services Network (ESN)	1,088.0	1,157.6	467.9	457.2	258.6
Frequency Management Support	65.1	53.7	67.9	61.6	73.9
Enterprise Services Network (ESN) - Central Bill Pass-Throughs	-	-	700.0	889.5	1,096.5
NTIA Spectrum Management	130.2	116.3	118.5	99.1	102.1
Solutions, Design, and Innovation					
Solutions, Design, and Innovation (SDI) (formerly Web & Internal/External					
Communications)	-	30.7	30.4	83.3	83.0
DOI Planning and Portfolio Management					
Architecture & IT Portfolio Performance Management (formerly Enterprise					
Architecture)	200.0	214.9	251.7	284.9	242.5
IT Budget Formulation & Portfolio Development (formerly Capital Planning)	178.6	160.5	188.0	176.6	195.5
Independent Verification & Validation-Risk Mgmt (formerly IT Security-IVV)	120.1	130.7	109.0	121.1	133.1
Assessment & Authorization Services (formerly a portion of IT Security-Info					
Assurance Division)	-	14.2	16.6	16.9	17.1
IT Security (formerly a portion of IT Security-Info Assurance Division)	-	19.5	16.2	14.5	67.5
Information Assurance Operations Service					
Information System Security (ISSO)	-	-	-	14.4	18.9
Office of Information Assurance Division Leadership (formerly a portion of IT					
Security-Info Assurance Division)	-	41.6	48.7	45.5	74.1
Identity Credential Access Management (ICAM) (formerly DOI Access)	72.9	78.4	74.9	83.1	72.5
Enterprise Continuous Diagnostics and Monitoring	-	-	70.4	71.3	73.3
Enterprise Security Information & Event Management Solution (SIEM)	-	-	152.3	154.2	156.3
Office of the Solicitor					
FOIA Appeals	29.3	34.2	33.8	34.0	10.4
IBC Human Resources Directorate					
Employee Express (Pass-Through)	-	-	-	38.4	53.2
TOTAL	2,346.0	2,664.5	4,626.5	4,617.8	22,138.8

¹Centralized Billing is the mechanism used by the Department and the IBC to collect funds from the bureaus for services provided by the Department and IBC as part of the Department's WCF.

The Office of the Secretary's (IOS) Centralized Billing Activities: Funding in 2017 continues to fund support services and common services provided by the IOS.

<u>FBMS Infrastructure Hosting & Support</u>: This program is carried out by the Department's FBMS Business Integration Office (BIO) and is responsible for maintaining accurate financial data within FBMS. This activity provides IT hosting support for FBMS and the billing methodology is based on a redirection of bureau funds for legacy system hosting.

FBMS Master Data Management: This program is responsible for maintaining accurate financial data within FBMS. The overall strategy for updating FBMS master data includes: (1) vendor updates and vendor-related activities; and (2) system options and accounting maintenance activities.

<u>Capital Planning and Investment Control (CPIC)</u>: This activity supports capital planning duties within the Office of Budget. The CPIC Program is responsible for maintaining a sound performance-based process that tracks the progress of all major IT investments, and ensures decisions are based on a set of predefined criteria regarding those investments. The Department billing methodology is based on HSPD-12 logical access head count.

<u>Travel Management Center</u>: This program manages and oversees the Department's online travel reservations program and migration to the new Government-wide E-Travel system for initiating and completing official travel arrangements on a Department-wide basis using electronic means. The Department billing methodology is based on the total number of bureau employees per offsite location.

<u>Interior Collections Management System (ICMS)</u>: The Interior Museum Program's Interior Collections Management System (ICMS) is a program that was originally funded from bureau budgets earmarked for bureau museum collections management systems. The ICMS provides Department-wide consistency in accounting for, reporting on, and providing access to the Department's bureau museum collections for use in delivery of bureau mission and compliance activities to the American public. The Department billing methodology is based on the total of each bureau's museum collections.

<u>Interior Asset Disposal System (O&M):</u> This activity with the Office of Property and Acquisition Management provides the means for bureaus to electronically report excess government owned personal property for internal screening for reuse and to avoid the cost of new procurements by acquiring same or like items.

<u>DOT</u> Relocation Technical Assistance: This activity supports P.L. 91-646, Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 which was enacted to ensure that people whose real property is acquired, or who move as a result of projects receiving Federal funds, will be treated fairly and equitably and will receive assistance in moving from the property they occupy.

<u>Department of the Interior (DOI) University Management</u>: This activity manages and oversees all programs within DOI University.

<u>Department-wide Training Programs (Includes Online Learning)</u>: The program provides for oversight, development, and delivery of technology enabled learning opportunities. This activity also operates DOI Learn, the Department's enterprise learning management system. The IBC bases its billing methodology on Department-wide FTE.

Learning and Performance Center Managements: The program provides for oversight, management, and operation of the Leadership and Performance Centers. The Leadership and Performance Centers provide classroom courses and development opportunities to the Department's employees. The IBC bases its billing methodology on Department-wide FTE. Enterprise Services Network (ESN): The Enterprise Service Network is an integrated network which will provide access to the Internet, a Department-wide intranet, and a fully operational technical support center. The system will provide better services and a uniformly secure environment, standardized and efficient 24-7 operations, and improved technical support. ESN also facilitates the consolidation of directory services, web hosting, data warehousing, and other applications and systems. The Department billing methodology is based on the bandwidth usage and number of sites within each bureau.

<u>Frequency Management Support</u>: The Department provides radio spectrum management services for all of its bureaus as well as other Federal activities and the insular areas, and coordinates radio policy throughout Interior. The Department billing methodology is based on the number of frequencies managed per bureau.

Enterprise Services Network (ESN) – Central Bill Pass-throughs: The ESN is an integrated network which provides access to the Internet, a Department-wide intranet, and a fully operational network operations and security support center. The ESN provides upgraded services, a uniformly secure environment, standardized and efficient 24/7 operations, and technical support. The ESN also facilitates the consolidation of directory services, Web hosting, data warehousing, and other applications and systems. This activity funds circuits, Verizon network operations services and other GSA Network contract services.

National Telecommunications and Information Administration (NTIA) Spectrum Management: NTIA, under delegated authority from the President, manages the Federal government's use of the radio spectrum. NTIA assigns frequencies to Federal users, assesses interference concerns, assures spectrum availability for future needs, and improves efficiency while minimizing costs. The Department billing methodology is based on the number of frequencies per bureau.

Solutions, Design, and Innovation (SDI): This program is responsible for developing, coordinating, and implementing Department-wide WEB consolidation including the WEB policies, standards, and guidelines. It also provides oversight and technical assistance to bureaus. The Department billing methodology is based on Department-wide FTE.

Architecture & IT Portfolio Performance Management (Formerly Enterprise Architecture): The Architecture & IT Portfolio Performance Management program establishes a framework for its IT investments. Implementation of the IEA is mandated by the Clinger-Cohen Act, and the Department's approach has been endorsed by the Office of Management and Budget and Congress. An enterprise architecture is a master blueprint for systematically defining an organization's current (baseline) and desired (target) architecture, aligned with the mission of the organization. The IEA, through multiple iterations, documents business processes, the data required to accomplish those processes, applications required to manipulate and manage the

required data, and the technology components needed to deliver data and applications to the business community. The Department billing methodology is based on the number of users (population).

IT Budget Formulation & Portfolio Development (Formerly Capital Planning): In compliance with the Clinger-Cohen Act, the Department has established an IT Formulation & Portfolio Development program that is aligned with the Department's Enterprise Architecture and Strategic Plan. The program is responsible for maintaining a sound performance-based process that tracks the progress of all major IT investments and ensures decisions are based on a set of predefined criteria regarding those investments. The Department billing methodology is based on HSPD-12 logical access head count.

Independent Verification & Validation (Formerly IT Security-IVV): The Independent Verification & Validation program provides policy and guidance on appropriate information assurance measures for the Department's Information Technology systems, applications, telecommunications networks, and related resources. The program develops and maintains the agency-wide security training program; tests perimeter defenses; conducts oversight of Federal Information Security Management Act (FISMA) and National Institute of Standards and Technology (NIST) compliance; provides coordination and oversight of certification and accreditation of IT systems; and develops policy and standards for critical infrastructure enhancements and Public/Private Key Infrastructure. The Department billing methodology is based on the HSPD-12 logical access head count.

Assessment and Authorization Services: The Department shared services for Assessment and Authorization support Authorizing Officials, System Owners and Information Security System Officers in appropriately identifying and selecting the relevant management, operational and technical security controls that are necessary to ensure the Confidentiality, Integrity and Availability objectives are met to safeguard agency information and required to be designed and implemented for their information system. Once implemented, this service supports the assessment of the security controls through appropriate testing and evaluation to ensure their effectiveness. This service serves as a consultant to System Owners and Information System Security Officers during the design, build test, deployment and ongoing operations of their information system and throughout the Systems Development Life Cycle.

<u>Information Technology (IT) Security</u>: This activity supports the Department by formulating IT security policies, standards, and guidelines for implementation by infrastructure and mission and business information systems. IT Security controls help to safeguard the Confidentiality, Integrity, and Availability of agency information and information systems with applicable laws, rules, regulations, and standards. This service also oversees DOI's IT Security education, awareness, and role-based training that are required by the Federal Information Security Management Act (FISMA) of 2002.

<u>Information System Security Officer (ISSO):</u> This activity is responsible for maintaining a robust network security program through training, regulatory compliance, and improving the security posture of the network.

Office of Information Assurance Division Leadership (formerly a portion of IT Security-Info Assurance Division): The Information Management and Assurance Division (IMAD) formulates policies, standards, and guidelines for information management and enterprise information assurance related to IT Security, Privacy, Records, and Information Management programs.

Identity Credential Access Management (ICAM) (Formerly DOI Access): Homeland Security Presidential Directive 12 mandated digital credential issuance capability and initial purchases of smart cards in 2005. This program provides Department-wide services for card production and maintenance. After completion of the personal identification verification process, digital certificates are loaded onto smart cards for all employees and contractors who need them. The certificates have Department-specific profiles and meet the requirements of the Federal Common Policy Framework. Interior contracts with GSA for card enrollment and production. The billing methodology is based on the number of card users per bureau.

Enterprise Continuous Diagnostics and Monitoring (CDM): This activity supports the need to detect potential network threats throughout Interior's IT infrastructure. Operations and support of this activity allows Interior to determine the source and content of data being accessed by external sources, and notify the bureau or office of the vulnerability. This assessment supports six full-time staff to implement the OMB-mandated CDM program that is being administered by the Department of Homeland Security.

Enterprise Security Information and Event Management Solution (SIEM): This activity supports the need to detect potential network threats throughout Interior's IT infrastructure. The program funds 2 full-time staff to provide real-time security information to management and technical staff and to provide enhanced situational awareness of threats and vulnerabilities.

<u>Freedom of Information Act (FOIA) Appeals</u>: The Office of the Solicitor is responsible for responding to the Department's current FOIA appeals. The Department billing methodology is based on the number and type of FOIA appeals outstanding.

<u>Employee Express (Pass-Through):</u> This activity provides payroll operations and processing, OPM Employee Express, and the HR System Integration Framework, which integrates to component HR systems.

Immediate Office of the Secretary and IBC Direct Bills

Dollars in Thousands FY 2013 FY 2014 FY 2015 FY 2016 Activity FY 2017 Payroll & HR Systems (new in FY 2017) 162.8 DOI Access (ICAM) 584.0 525.1 525.1 650.3 650.3 ITD ISSO Informtion Assurance Operations 34.7 34.3 Consolidated Learning & Performance Management Center 80.0 81.6 ITD PPCD Security Compliance 11.3 11.3 92.9 e-OPF 55.8 89.5 93.0 89.0 Enterprise Services Network (ESN) (Circuit Cost) 826.8 1,622.5 1,328.9 1,600.6 1,600.6 ISSO ITD Telecommunications 16.5 16.5 End Point Manager Licenses (new in FY 2017) 207.1 223.2 Accounting Operations 235.7 224.5 227.1 TOTAL 1,466.6 2,472.8 2,170.1 2,710.9

<u>Payroll and HR Systems</u>: The NBC Payroll and HR systems support the integrated HR and payroll systems and operations to other Federal agency clients and above baseline services to Interior customers as requested.

<u>DOI Access (ICAM)</u>: This activity provides Department-wide services for HSPD-12 compliant smart card production and maintenance including maintenance of Department-specific profiles and interface with GSA for card enrollment and production.

<u>ITD ISSO Information Assurance Operations:</u> This activity is responsible for maintaining a robust network security program through training, regulatory compliance, and improving the security posture of the network.

Consolidated Learning and Performance Management Center: This activity provides for the oversight, development, and operation of the Learning and Performance Centers located in Washington, DC; Denver, CO; and Albuquerque, NM. It provides mission critical classroom based training and career development opportunities.

ITD Policy, Planning and Compliance Davison Security Compliance: This activity provides records management for the Department including: the operation of the Secretary's Files unit; Freedom of Information Act (FOIA) processing for Department-wide requests; and coordination of the Office of Policy, Management and Budget (PMB) correspondence. This account was consolidated with Electronic Records Management in 2016.

<u>e-OPF:</u> This program stores an electronic version of an employee's Official Personnel Folder and allows employees and human resource specialists to access it via the Web.

<u>Enterprise Services Network (ESN) Circuit Cost:</u> The ESN is an integrated network which provides access to the Internet, a Department-wide intranet, and a fully operational network operations and security support center.

<u>ISSO ITD Telecommunications:</u> This activity provides telecommunications services, including maintenance contracts, long distance telecommunications, and video and teleconference scheduling.

<u>End Point Manager Licenses:</u> The IBM Tivoli Endpoint Manager (IEM) tool provides the Department with ability to do basic hardware asset management, software asset management, configuration management and vulnerability management across all desktops, laptops and servers on the Department's networks.

<u>Accounting Operations:</u> This activity provides support for general ledger financial transactions services that are compliant with U.S. Standard General Ledger practices, including monitoring funds availability, reconciling financial data, and researching abnormalities and balance discrepancies within the general ledgers.

FY 2017 Summary of the Department's Assessments to Reclamation's Working Capital Fund:

 Centralized Billing
 \$22,138,800

 Direct Billing
 3,080,600

Total, FY 2016 Assessments from the Department of the Interior to Reclamation's Working Capital Fund

\$25,219,400

Permanent Appropriations

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION: The Permanent Appropriations include the following: Colorado River Dam Fund, Boulder Canyon Project; and four Miscellaneous Permanent Appropriations (two within the North Platte Project, Klamath Reclamation Area, and Operation and Maintenance of Quarters).

PURPOSE: Permanent Appropriations provide for the transfer of revenues from various funds toward the construction, operation, maintenance, replacement, environmental studies, and other associated activities at various projects. The Permanent Appropriations also provide for the payment of interest to the Treasury and transfers of monies to other funds and governmental entities.

AUTHORIZATIONS: See the individual fund summaries for authorizations.

WORK PROPOSED FOR FY 2017: See the following individual writeups for details.

Colorado River Dam Fund Boulder Canyon Project

LOCATION: Southern Nevada and Western Arizona.

DESCRIPTION/JUSTIFICATION: The Boulder Canyon Project Act of 1928 established the Colorado River Dam Fund (Fund) and defined its uses. Revenues are derived mainly from the sale of electrical energy generated at Hoover Dam. The Hoover Power Plant Act of 1984 established that all receipts would be deposited into the Fund to be available without further appropriation for payment of operations, maintenance, replacement, interest, and repayment associated with the project. The Hoover Power Plant Act of 1984 also provided for the transfer of power revenues to the Lower Colorado River Basin Development Fund.

Hoover Dam forms Lake Mead, providing flood control, river regulation, fish and wildlife benefits, irrigation, municipal and industrial water supplies for local and downstream purposes, generation of electrical energy, and major recreational activities for the southwestern United States. The powerplant provides an annual power generation of approximately 4.3 billion kilowatt hours of low cost, renewable hydropower which serves various sections of the southwest and the Nation as a whole. Maximum powerplant capacity totals 2,078 megawatts.

AUTHORIZATION: P.L. 642, Boulder Canyon Project Act, December 21, 1928; P.L. 756, The Boulder Canyon Project Adjustment Act, July 19, 1940; P.L. 98-381, The Hoover Power Plant Act of 1984, August 1984.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–FY 2018 as follows:

Mission Area: Powering our Future and Responsible Use of the Nation's Resources

Goal: Secure America's Energy Resources

Performance Measure: Percent of hydropower facilities in good condition as measured by the Facility

Reliability Rating

Performance Measure: Percent of time that BOR hydroelectric generating units are available to the inter-connected western electrical system during daily peak demand periods

Performance Measure: Forced outage factor lower than or equal to the industry average of 2.2%

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

The budget (Ten Year Operating Plan) for the Boulder Canyon Project (BCP) is developed by the Bureau of Reclamation (Reclamation) and Western Area Power Administration (Western) in concert with BCP power contractors. This is a collaborative process that relays information to the contractors on plans for the on-going operation of the BCP and provides a forum for discussion. The process promotes transparency and facilitates BCP customers' ability to give input into the operations of the project prior to the expenditures of significant funds on replacements, upgrades, betterments, and operation and maintenance items. It also assures that the project is being operated as efficiently and effectively as possible and provides a mechanism to link the budget, power rate, and ten-year planning process.

The Ten Year Operating Plan is a living document, allowing for adjustments if unforeseen circumstances occur. If issues or opportunities for improvement and/or efficiency arise, modifications to the budget are

made through consultation and collaboration with contractors. Quarterly meetings are held to review detailed financial reports in order to keep contractors abreast of new developments, technology, and progress of planned work. Through this interaction with BCP customers, an excellent working relationship and level of trust has been developed.

Planning and timing of the work to be performed is essential to maintain this aging National Critical Infrastructure. Consultation during the budget development process ensures that all parties are involved in decision making with respect to approval of upgrades, betterments, and operation and maintenance items required to ensure facility reliability and efficiency.

Due to the recent years of drought and resultant lowering lake levels, efficiency improvements are paramount and have been made using this collaborative work planning process. Examples include:

- Replacing cast steel wicket gates with stainless steel wicket gates: Thinning the wicket gate cross section increases the servomotor stroke and increases capacity by enlarging the total gate opening; Reducing; reducing friction to flow also increases efficiency.
- Replacing worn crown plates and wicket gate bushings: Reducing leakage through the units while motoring or shut down as well as reducing or eliminating wear plate cavitation and outage time due to shear pin breakage.
- Replacing seal rings: Contributes to turbine efficiency.
- Purchasing and installing wide-head turbine: Improves efficiency, capacity, and rough zones under low lake elevations.

Together with our customers, the Lower Colorado Region is able to successfully operate, maintain, and improve the project facilities without seeking Federal appropriations, while contributing significantly to the successful accomplishment of the Lower Colorado Region's and Reclamation's primary mission.

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted 3/	President's Budget 3/
Water and Energy Management and Development	\$14,580,000	\$14,637,000
Facility Operation	74,676,000	68,880,000
Facility Maintenance and Rehabilitation	14,721,000	19,565,000
Total Obligations	103,977,000	103,082,000
Unobligated Balance Available, Start of Year 1/	(33,363,754)	(34,881,942)
Unobligated Balance Available, End of Year	33,363,754	34,881,942
Impact of Sequestration	40,000	544,000
Budget Authority	\$104,017,000	\$103,626,000
Total BOR Appropriation-Permanent Indefinite	\$104,017,000	\$103,626,000
Balance, end of year	0	0
Total Revenues 2/	\$104,017,000	\$103,626,000

^{1/} Includes Post-retirement Benefits, Working Capital Fund, and Unapplied Uprating Credits.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Provides for payment of interest to the Department of the Treasury on funds advanced for construction of Hoover Dam and appurtenant project works (\$469,000), principal payment to the Treasury (\$2,368,000), payments to the States of Arizona and Nevada in lieu of taxes (\$600,000), and funds transferred to the Lower Colorado River Basin Development Fund (\$11,200,000). \$14,637,000

Facility Operations - Continues operation, preventive maintenance, and administrative support functions of the project to facilitate water and power deliveries. This includes Reclamation and Western water and power operations, uprating credits, forecasting, water scheduling, hazardous materials management, river telemetry, policy/regulation, communications as well as guides, security, and support for visitor services. The decrease is due to the expiration and liquidation of uprating credit payments.

68,880,000

Facilities Maintenance and Rehabilitation - Continues non-routine maintenance activities and replacements to infrastructure and structural facilities. Continues work rebuilding and replacing generator coolers which have exceeded their service life and are experiencing failures; evaluating and replacing cylinder gate stems to continue operation and protection of the penstock systems; replacing Hoover Dam's wearing elevator motors and controllers (which are over 25 years old); replacing the entire wastewater treatment plant to stay in compliance with changing regulations; replacing drum gates and seals to ensure gates will open as designed and allow water flow through the spillway; replacing the 480V switchgear to prevent a forced outage on units with no power generation; and replacing 16.5 KV generator breakers to prevent short-circuiting. Continues penstock spot coating to prevent corrosion; power plant piping maintenance to reduce the risk of cooling water and fire water supply failure; paradox

^{2/} Includes Principal Repayment (\$2,242,000 in FY 2016 and \$2,368,000 in FY 2017).

^{3/} A portion of this appropriation ("administrative expenses") is subject to sequestration.

valve repairs to restore the valves to serviceable condition; maintenance of generators to achieve life extension; maintenance of the old U.S. Route 93 to avoid degradation; and repair and stabilization of the Lower Portal Road bridge abutment. The increase is due to more replacement items.

<u>19,565,000</u>

Impact of Sequestration <u>544,000</u>

Total Obligations 103,626,000

Total Appropriations, Permanent Indefinite (Non-Appropriated) \$103,626,000

Miscellaneous Permanent Appropriations

DESCRIPTION

Miscellaneous Permanent Appropriations consist of four separate appropriations: Operation, Maintenance, and Replacement of Project Works, North Platte Project; Payments to Farmers' Irrigation District; Payments to Local Units, Klamath Reclamation Area, and Operation and Maintenance of Ouarters.

A percentage of each of these accounts is subject to sequestration.

FY 2017 PROGRAM

Operation, Maintenance, and Replacement of Project Works, North Platte Project (Gering and Fort Laramie, Goshen and Pathfinder Irrigation Districts) (P.L. 578 (66 Stat 755), July 17, 1952)
Revenues are derived from the operation of project power plants, leasing of project grazing and farm lands, and the sale or use of town sites. These revenues are deposited in a special receipt account which is maintained exclusively for that purpose. The monies are collected in one year and disbursed in the next. \$7,000

Payment to Farmers' Irrigation District (North Platte Project, Nebraska-Wyoming) (P.L. 85-123 (71 Stat 342), August 13, 1957)

The source is power revenues from the North Platte project. Payments are made annually to the Farmers' Irrigation District toward payment of the annual cost of carrying the Northport Irrigation District's water through the Farmers' Irrigation District canal. The monies are deposited in the Reclamation Fund and disbursed from an expenditure account.

9,000

Payments to Local Units, Klamath Reclamation Area (P.L.88-567 (78 Stat. 850;16 USC 695m) September 2, 1964

Twenty-five percent of net revenues collected during each fiscal year from the leasing of Klamath project reserved Federal lands, within the boundaries of the Lower Klamath National Wildlife Refuge and the Tule Lake National Wildlife Refuge, are to be paid annually by the Secretary to the counties in which such refuges are located. Such payments are made on a pro rata basis based upon the refuge acreage in each county. The monies are deposited in the Reclamation Fund and disbursed from an expenditure account. Payments are made each year to Klamath, Modoc, and Siskiyou Counties. **250,000**

Operation and Maintenance of Quarters (5 USC 5911)

Rents and charges collected by payroll deduction or otherwise for the use or occupancy of quarters shall be deposited in a special fund in each agency, to remain available until expended, for the maintenance and operation of the quarters of that agency.

\$267,000

APPROPRIATION:

FY 2017 \$533,000 FY 2016 \$501,000

Appropriation amounts include the impact of sequestration.

REVENUE FINANCED PROGRAMS

LOCATION: The Revenue Financed Programs in Reclamation are located in Arizona, California, Nevada, New Mexico, Utah, and Wyoming.

DESCRIPTION/JUSTIFICATION: The Revenue Financed Programs include the following: Lower Colorado River Basin Development Fund and the Upper Colorado River Basin Fund, Colorado River Storage Project. The Revenue Financed Programs fund the operation and maintenance, replacement, environmental studies, and other associated activities on projects where construction is complete and the facilities are operational and revenue producing.

AUTHORIZATION: See the individual fund summaries for authorizations.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Expenditures	FY 2017 President's Budget	Revenues	FY 2017 President's Budget
Lower Colorado River Basin Development Fund			
Colorado River Basin Project	161,337,000	Colorado River Basin Project	161,337,000
Navajo Generating Station - O&M	158,837,000	Navajo Generating Station - Power Sales	56,885,000
Environmental Commitments & O&M Oversight	2,500,000	CAWCD Power Usage Payments	104,452,000
Arizona Water Settlement Act	94,914,000	Arizona Water Settlement Act	94,914,000
		CAP Project Repayment	94,914,000
Colorado River Basin Salinity Control Program (CRBSCP) 1/	8,600,000	Colorado River Basin Salinity Control Program (CRBSCP)	8,600,000
Contributions to Title II 1/	3,315,000	Miscellaneous Sources	8,600,000
Contributions to USDA	5,285,000		
Total LCRBDF	264,851,000		264,851,000
Upper Colorado River Basin Fund Consumptive Use Studies	335,000	Upper Colorado River Basin Fund	335,000
Dolores	,	Upper Colorado River Basin Fund	598,000
Emergency Funds	· · · · · · · · · · · · · · · · · · ·	Upper Colorado River Basin Fund Upper Colorado River Basin Fund	590,000 0
Initial Units, Colorado River Storage Project (CRSP)		Upper Colorado River Basin Fund	U
			100.476.000
I Initial Units, CRSP	, ,	* *	100,476,00 0 98,841,000
Initial Units, CRSP CRBSCP, Contributions to Title II 1/	98,841,000	Upper Colorado River Basin Fund	98,841,000
CRBSCP, Contributions to Title II 1/	98,841,000 831,000	Upper Colorado River Basin Fund Upper Colorado River Basin Fund	98,841,000 831,000
CRBSCP, Contributions to Title II ^{1/} CRBSCP, Contributions to USDA	98,841,000 831,000 804,000	Upper Colorado River Basin Fund	98,841,000 831,000 804,000
CRBSCP, Contributions to Title II 1/	98,841,000 831,000 804,000 1,033,000	Upper Colorado River Basin Fund Upper Colorado River Basin Fund Upper Colorado River Basin Fund	98,841,000 831,000 804,000 1,033,000
CRBSCP, Contributions to Title II ^{1/} CRBSCP, Contributions to USDA Quality of Water Studies	98,841,000 831,000 804,000 1,033,000 75,000	Upper Colorado River Basin Fund	98,841,000
CRBSCP, Contributions to Title II CRBSCP, Contributions to USDA Quality of Water Studies Evaluation of Existing Dams	98,841,000 831,000 804,000 1,033,000 75,000 116,000 190,000	Upper Colorado River Basin Fund	98,841,000 831,000 804,000 1,033,000 75,000 116,000
CRBSCP, Contributions to Title II CRBSCP, Contributions to USDA Quality of Water Studies Evaluation of Existing Dams Central Utah Project San Juan-Chama Seedskadee Project	98,841,000 831,000 804,000 1,033,000 75,000 116,000 190,000 2,042,000	Upper Colorado River Basin Fund	98,841,000 831,000 804,000 1,033,000 75,000 116,000 190,000 2,042,000
CRBSCP, Contributions to Title II CRBSCP, Contributions to USDA Quality of Water Studies Evaluation of Existing Dams Central Utah Project San Juan-Chama Seedskadee Project Total Program	98,841,000 831,000 804,000 1,033,000 75,000 116,000 190,000 2,042,000	Upper Colorado River Basin Fund	98,841,000 831,000 804,000 1,033,000 75,000 116,000 190,000 2,042,000
CRBSCP, Contributions to Title II CRBSCP, Contributions to USDA Quality of Water Studies Evaluation of Existing Dams Central Utah Project San Juan-Chama Seedskadee Project	98,841,000 831,000 804,000 1,033,000 75,000 116,000 190,000 2,042,000	Upper Colorado River Basin Fund	98,841,000 831,000 804,000 1,033,000 75,000 116,000 190,000 2,042,000

^{1/} Included in Colorado River Basin Salinity Control Program, Title II under Water & Related Resources (see Lower Colorado Region & Upper Colorado Region narratives.)

Lower Colorado River Basin Development Fund Central Arizona Project

LOCATION: The Central Arizona Project (CAP) is located in central and southern Arizona, southern California, southern Nevada, western New Mexico, and southern Utah. The Navajo Participating Power Project is located in northern Arizona.

DESCRIPTION/JUSTIFICATION: The Lower Colorado River Basin Development Fund (Fund) allows for the collection of revenues from the sale of surplus power to provide for CAP operations and maintenance, and to aid in the repayment of the CAP. The operation and maintenance program for the CAP covers completed portions of the project, which remain a Federal responsibility, and long-term environmental commitments. The water development features of the CAP include the aqueduct system and the New Waddell Dam portion of the regulatory storage division. The power development facilities include Reclamation's entitlement to 546,750 kilowatts of power from the Navajo Generating Station, which is a 2,250 megawatt coal-fired steam plant operated by the Salt River Project.

The Fund was established to collect revenues from the CAP and to collect certain revenues generated from the Boulder Canyon and Parker-Davis Projects, along with the contemplated Pacific Northwest - Pacific Southwest Power Intertie. These revenues are available without further appropriation for the purposes defined in the Colorado River Basin Act as amended by Title I of P.L. 108-451, the Arizona Water Settlements Act. These purposes include defraying the costs of CAP operation and maintenance. The Arizona Water Settlements Act also authorizes the use of revenues that would have been returned to Treasury for repayment of the CAP construction costs to be retained in the Fund and invested. The earnings from these investments will also be retained in the Fund.

AUTHORIZATION: P.L. 90-537, The Colorado River Basin Project Act, September 30, 1968, as amended by P.L. 97-373, December 20, 1982 and P.L. 108-451, The Arizona Water Settlements Act, December 10, 2004, as amended by P.L. 110-148, December 21, 2007.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted 1/	President's Budget 1/
Facility Operations	\$154,045,000	\$161,337,000
Total Program	\$154,045,000	\$161,337,000
Applied Revenues	(154,045,000)	(161,337,000)
Total Reclamation Allotment	\$0	\$0

A portion of this appropriation ("administrative expenses") is subject to sequestration.

OTHER INFORMATION: Under Section 205 of P.L. 108-137, the Energy and Water Appropriations Act of FY 2004, the transfer of funds to the general fund of the Treasury for project repayment was suspended for ten years beginning December 1, 2003. This was in anticipation of enactment of the Arizona Water Settlements Act, P.L. 108-451, which was signed on December 10, 2004. P.L. 108-451 revised Section 403 of the Colorado River Basin Project Act on the "additional uses of revenue funds." Accordingly, revenues from project repayment are retained in the Fund and available for use, beginning January 2010 for the purpose defined in the Arizona Water Settlements Act.

WORK PROPOSED FOR FY 2017:

Facility Operations - Continues the operation and maintenance functions of the Navajo Generating Station, long-term environmental commitments, and Federal oversight of the project. The increase is due to higher coal supply expenses. \$161,337,000

Revenues (161,337,000)

Reclamation Request \$0

Lower Colorado River Basin Development Fund Arizona Water Settlements Act

LOCATION: Facilities and activities associated with the Arizona Water Settlements Act are located in central and southern Arizona and western New Mexico.

DESCRIPTION/ JUSTIFICATION: The Arizona Water Settlements Act (Act) resolved the water rights claims of the Gila River Indian Community (GRIC) and the San Xavier District of the Tohono O'odham Nation, through amendments to the Southern Arizona Water Rights Settlement Act of 1982. The Act also serves as the implementing legislation to resolve operations and repayment issues associated with the Central Arizona Project (CAP) in Arizona. The Act amended the Colorado River Basin Project Act to authorize the Lower Colorado River Basin Development Fund (Fund) to be used as the funding mechanism for all authorized components of the Act. The revenues that would have been returned to the Department of the Treasury from repayment of the CAP construction costs are now retained and invested for the purposes of the Act. Beginning January 2010, these funds were available without further appropriation for the specified purposes identified in the Act.

The Act authorized the following activities to be funded from revenues retained in the Fund: Completion of construction of the Indian Distribution Systems and development of the New Mexico Unit of the CAP; rehabilitation of both Indian and non-Indian portions of the San Carlos Irrigation Project (SCIP); annual payment of the fixed operation, maintenance, and replacement charges associated with the delivery of CAP water held under long-term contracts for use by Arizona Indian tribes; deposits to the Gila River Indian Community Water Operations, Maintenance and Repair OM&R Trust Fund; completion of distribution systems on the Tohono O'odham Nation that were authorized under the original Southern Arizona Water Rights Settlement Act, as well as a one-time payment to the San Xavier District in lieu of constructing New Farm; retirement of debt incurred by Safford, Arizona, associated with construction of the Safford Wastewater Treatment Facility; the development of the Roosevelt Habitat Conservation Plan by the Salt River Project; the United States' cost to meet its firming obligations; water rights reduction programs authorized in the Upper Gila River area; payment to the Gila Valley Irrigation District to construct a pipeline; and creation of a funding source for other future Indian Settlement in Arizona.

AUTHORIZATION: P.L. 90-537, Colorado River Basin Project Act, September 30, 1968; P.L. 97-293 - Title II, Southern Arizona Water Rights Settlement Act of 1982, October 12, 1982; P.L. 97-373, Amend Title III of the Colorado River Basin Project Act, December 20, 1982; and P.L. 108-451, Arizona Water Settlements Act, December 10, 2004, as amended by P.L. 110-148, December 21, 2007.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2014–2018 as follows:

Mission Area: Ensuring Healthy Watersheds and Sustainable, Secure Water Supplies

Goal: Manage Water and Watersheds for the 21st Century

Performance Measure: Percent of water infrastructure in good condition as measured by the Facility

Reliability Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

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	FY 2016	FY 2017
Activity	Enacted 1/	President's Budget 1/
Water and Energy Management and Development	\$77,931,000	\$72,914,000
Facility Operations	27,160,000	22,000,000
Total Program	\$105,091,000	\$94,914,000
LCRBDF – AWSA Revenues	(105,091,000)	(94,914,000)
Total Reclamation Allotment	\$0	\$0

¹/ A portion of this appropriation ("administrative expenses") is subject to sequestration.

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development -

GRIC SCIP Rehab & GRIC P-MIP - The Gila River Indian Community (Community) developed a Master Plan that identified approximately 146,000 agricultural acres that it plans to rehabilitate and/or develop. The 146,000 acres are broken down by 50,000 acres that are on the reservation within the San Carlos Irrigation Project (SCIP) and approximately 96,000 acres outside SCIP, which was designated as Pima-Maricopa Irrigation Project (P-MIP) lands and funded under the authority of the Indian Distribution Division (IDD) of the CAP. In 1994, Reclamation and the Community began providing funding under CAP for design and construction of the P-MIP components. Pursuant to the Act, Reclamation will continue funding for rehabilitation of the SCIP works.

The Pima Canal (Reaches BW-1A and BW-1B) is a joint works canal that will convey water from the turnout on the CAP aqueduct to the reservation, and will be the main water supply source for both projects (SCIP and P-MIP) when completed. As a joint works facility, the cost to construct the Pima Canal and its appurtenances will be shared by both P-MIP (CAP) and SCIP (Arizona Water Settlements Act). The Community will continue program administration for all the tribal contractor programs and continue construction of the P-MIP components. Increase is due to increase in the level of construction activities.

GRIC SCIP Rehab	\$25,000,000
GRIC P-MIP	<u>20,241,000</u>
	45 241 000

San Carlos Irrigation and Drainage District Lining - The San Carlos Irrigation and Drainage District will continue design, environmental clearance, and construction on the lining and rehabilitation of the non-Indian features of the San Carlos Irrigation Project. Decrease is due to a delay of planned construction activities.

8.000.000

San Carlos Apache Tribe, CAP IDD - Continues project designs of a Black River Diversion and Conveyance System project configuration. Continues National Environmental Policy Act (NEPA) activities (Environmental Impact Statement), cultural resource surveys, and mitigation requirements. Continues construction of the tunnel project configuration. Decrease is due to delays in the planned tunnel construction activities.

2,000,000

<u>Southern Arizona Water Rights Settlement Act Distribution System, CAP IDD</u> - The authorized San Xavier Cooperative Farm extension will be constructed in two phases to allow the efficient development of farm operations as the farm is expanded. Phase I of the extension will include about 350 acres of land

adjacent to the lands at the south end of the farm. Phase II will be further south and extend several miles. Continues construction design and NEPA activities for the farm extension. Decrease is due to delays in pre-construction activities.

2,000,000

Firming Costs - The Secretary is required to firm 28,200 acre-feet of non-Indian agricultural priority Central Arizona Project water reallocated to the Tohono O'odham Nation and 8,724 acre-feet of CAP non-Indian agricultural priority water to the extent such water is reallocated to Indian tribes under the terms of the Act. Funds will be used to purchase, if available, and store excess CAP water in a State of Arizona approved Recharge Facility in order to accrue long-term groundwater credits under a Water Storage Permit. These credits will be used, as needed, to meet delivery obligations during times of shortage. Funds may also be used to increase the amount of groundwater storage credits being accrued using the 28,200 acre-feet per year of Southern Arizona Water Rights Settlement Act effluent which is currently accruing 6,000 acre-feet per year of credits.

2,500,000

New Mexico Unit - The Secretary is required to make ten annual deposits into the New Mexico Unit Fund. The funds are to be used to pay the cost of construction or other water utilization alternatives permitted by the Act.

9,040,000

Reclamation Oversight - Reclamation was given the responsibility to provide oversight for the construction projects authorized under Section 203 of the Act. These construction projects are the rehabilitation of the Indian and non-Indian components of the San Carlos Irrigation Project.

Reclamation's cost to oversee, administer, and distribute funding from the Fund is also provided for in the Act.

400.000

<u>Other CAP Indian Distribution Division Systems, Yavapai Apache - Camp Verde</u> - Continues project designs, continues NEPA activities, completes evaluation of alternatives, and continues construction. Increase is due to an increase of planned construction activities. 3,733,000

<u>Sif Oidak District of the Tohono O'odham Nation, CAP IDD</u> - Continues project designs and continues feasibility level analysis. Decrease is due to delays in project design and feasibility analysis.

0

Total Other CAP Indian Distribution Division Systems

3,733,000

Subtotal, Water and Energy Management and Development

\$72,914,000

Facility Operations - Payment of Fixed OM&R Costs - Section 107 (a) of the Act authorizes the Secretary to "pay annually the fixed operation, maintenance, and replacement charges associated with the delivery of CAP water held under long-term contracts for use by Arizona Indian tribes." Decrease is due to an estimated decrease of water usage.

22,000,000

Revenues (94,914,000)

Reclamation Request

\$0

Upper Colorado River Basin Fund Colorado River Storage Project Revenues

LOCATION: The Colorado River Storage Project (CRSP) is located in northern Arizona, western Colorado, northwestern New Mexico, eastern Utah, and southwestern Wyoming.

DESCRIPTION/JUSTIFICATION: The Upper Colorado River Basin Fund provides for the operation, maintenance, and related activities of the Colorado River Storage Project. Revenues are collected from the sale of power and storage water and are deposited in the Basin Fund. The revenue generating features and components include the four Initial Units (Glen Canyon Dam, Reservoir and Power plant; Wayne N. Aspinall Storage Unit Dams, Reservoirs, and Power plants; Flaming Gorge Dam, Reservoir, and Power plant; and Navajo Dam and Reservoir), power features of the Dolores Project, the Seedskadee Project, Consumptive Use Studies, San Juan-Chama, Central Utah Project, Quality of Water Studies, Safety Examination of Existing Dams, and salinity cost-share projects.

Special studies being performed with revenues include: Glen Canyon Adaptive Management Program authorized by P.L. 102-575, and endangered fish studies related to the Recovery Implementation Program.

AUTHORIZATION: P.L. 84-485, The Colorado River Storage Project Act, April 11, 1956; P.L. 87-590, Fryingpan-Arkansas Project Act, August 16, 1962; P.L. 90-537, The Colorado River Basin Project Act, September 30, 1968; Grand Canyon Protection Act, Title XVIII of P.L. 102-575, October 30, 1992; P.L. 104-127, Federal Agriculture Improvement and Reform Act, April 4, 1996; and P.L. 106-392 and P.L. 112-270 Upper Colorado and San Juan River Basins Endangered Species Recovery Programs, October 30, 2000 and Jan 14, 2013.

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2016	FY 2017
Activity	Enacted 1/	President's Budget 1/
Water and Energy Management and Development	\$3,084,000	\$3,003,000
Land Management and Development	686,000	704,000
Fish & Wildlife Management and Development	18,927,000	19,495,000
Facility Operations	46,087,000	47,111,000
Facility Maintenance and Rehabilitation	30,045,000	34,330,000
Total Reclamation Amount	\$98,824,000	\$104,643,000
Non-Federal	216,000	222,000
Prior Year Funds	0	0
Total Program	\$99,040,000	\$104,865,000
Prior Year Funds/Non-Federal	(216,000)	(222,000)
Revenues	(98,824,000)	(104,643,000)
Total Reclamation Request	\$0	\$0

¹/ A portion of this appropriation ("administrative expenses") is subject to sequestration.

Upper Colorado River Basin Fund Colorado River Storage Project Revenues

WORK PROPOSED FOR FY 2017:

Water and Energy Management and Development - Continues compliance with P.L. 104-127 authorizing cost sharing in lieu of repayment for the Salinity Program \$1,635,000

Continues support for Quality of Water and Consumptive Use Studies. 1,368,000

Subtotal, Water and Energy Management and Development

\$3,003,000

Land Management and Development - Continues land resources management and general liaison tasks with land managing entities, Native Americans, other cooperating agencies, the public, and special interest groups.

704,000

Fish and Wildlife Management and Development -

<u>Initial Units</u> - Continues operation and maintenance of capital projects and monitoring of endangered fish that are part of the Recovery Implementation Programs for the Colorado and San Juan rivers.

8,417,000

Glen Canyon Adaptive Management Program - Continues monitoring and research associated with cultural, physical, biological, recreation and socioeconomic resources. Continues program oversight, administration, and participation in issues that affect Native American tribes. Continues scientific investigations by the Grand Canyon Monitoring and Research Center. Continues experimentation using Glen Canyon Dam releases and other tasks required to increase understanding on how to operate Glen Canyon Dam to meet statutory requirements.

Continues oversight, administration, and technical support of the Adaptive Management Program funded by power revenues. Continues experimental flow research; if hydrologic conditions preclude conducting these experiments, expenditure of these funds will be deferred to subsequent years.

USGS/GCMRC 9,824,000 USBR 1,254,000

Total Adaptive Management Program

Subtotal, Fish and Wildlife Management and Development

19,495,000

Facility Operations - Continues operation and routine maintenance of the Initial Units, Seedskadee, and Dolores power facilities and include the review of operating criteria and maintenance work associated with their operation. Continues support required to determine reservoir releases and to allow delivery of water.

47,333,000

Non-Federal (State of Wyoming for Fontenelle Dam and Reservoir) (207,000)

Non-Federal (Farmington Power Operations of Farmington, NM for the Navajo Dam and Reservoir)

(15,000)

Subtotal, Facility Operations

47,111,000

Facilities Maintenance and Rehabilitation - Continues extraordinary maintenance and replacement of items associated with dams, reservoirs, and powerplants for the Initial Units and extraordinary maintenance and replacement of items associated with like features for the Seedskadee and Dolores Projects. Continue purchase of heavy equipment and vehicles, and the replacement of the main step-up transformers at Glen Canyon power plant.

34,255,000

Upper Colorado River Basin Fund Colorado River Storage Project Revenues

<u>Safety Examination of Existing Dams</u> - Continues tasks for the Initial Units.	<u>75,000</u>
Subtotal, Facility Maintenance and Rehabilitation	34,330,000
Non-Federal (Revenues)	(104,643,000)
Reclamation Request	\$0

Appropriations Language for FY 2017

TITLE II DEPARTMENT OF THE INTERIOR

BUREAU OF RECLAMATION

The following appropriations shall be expended to execute authorized functions of the Bureau of Reclamation:

WATER AND RELATED RESOURCES (INCLUDING TRANSFERS OF FUNDS)

For management, development, and restoration of water and related natural resources and for related activities, including the operation, maintenance, and rehabilitation of reclamation and other facilities, participation in fulfilling related Federal responsibilities to Native Americans, and related grants to, and cooperative and other agreements with, State and local governments, federally recognized Indian tribes, and others, [\$1,118,972,000] \$813,402,000, to remain available until expended, of which \$22,000 shall be available for transfer to the Upper Colorado River Basin Fund and [\$5,899,000] \$5,551,000 shall be available for transfer to the Lower Colorado River Basin Development Fund; of which such amounts as may be necessary may be advanced to the Colorado River Dam Fund: *Provided*, That such transfers may be increased or decreased within the overall appropriation under this heading: *Provided further*. That of the total appropriated, the amount for program activities that can be financed by the Reclamation Fund or the Bureau of Reclamation special fee account established by 16 U.S.C. 6806 shall be derived from that Fund or account: Provided further, That funds contributed under 43 U.S.C. 395 are available until expended for the purposes for which contributed: *Provided further*. That funds advanced under 43 U.S.C. 397a shall be credited to this account and are available until expended for the same purposes as the sums appropriated under this heading: *Provided further*, That of the amounts provided herein, funds may be used for high priority projects which shall be carried out by the Youth Conservation Corps, as authorized by 16 U.S.C. 1706. (Energy and Water Development and Related Agencies Appropriations Act, 2016).

CENTRAL VALLEY PROJECT RESTORATION FUND

For carrying out the programs, projects, plans, habitat restoration, improvement, and acquisition provisions of the Central Valley Project Improvement Act, [\$49,528,000] \$55,606,000 to be derived from such sums as may be collected in the Central Valley Project Restoration Fund pursuant to sections 3407(d), 3404(c)(3), and 3405(f) of Public Law 102–575, to remain available until expended: *Provided*, That the Bureau of Reclamation is directed to assess and collect the full amount of the additional mitigation and restoration payments authorized by section 3407(d) of Public Law 102–575: *Provided further*, That none of the funds made available under this heading may be used for the acquisition or leasing of water for in-stream purposes if the water is already committed to in-stream purposes by a court adopted decree or order. (*Energy and Water Development and Related Agencies Appropriations Act*, 2016)

CALIFORNIA BAY-DELTA RESTORATION (INCLUDING TRANSFERS OF FUNDS)

For carrying out activities authorized by the Water Supply, Reliability, and Environmental Improvement Act, consistent with plans to be approved by the Secretary of the Interior, [\$37,000,000] \$36,000,000, to remain available until expended, of which such amounts as may be necessary to carry out such activities may be transferred to appropriate accounts of other participating Federal agencies to carry out authorized purposes: *Provided*, That funds appropriated herein may be used for the Federal share of the costs of CALFED Program management: *Provided further*, That CALFED implementation shall be carried out in a balanced manner with clear performance measures demonstrating concurrent progress in achieving the goals and objectives of the Program. (*Energy and Water Development and Related Agencies Appropriations Act*, 2016)

POLICY AND ADMINISTRATION

For expenses necessary for policy, administration, and related functions in the Office of the Commissioner, the Denver office, and offices in the five regions of the Bureau of Reclamation, to remain available until [September 30, 2017, \$59,500,000] expended, \$59,000,000 to be derived from the Reclamation Fund and be nonreimbursable as provided in 43 U.S.C. 377: Provided, That no part of any other appropriation in this Act shall be available for activities or functions budgeted as policy and administration expenses. (Energy and Water Development and Related Agencies Appropriations Act, 2016)

INDIAN WATER RIGHTS SETTLEMENTS

For carrying out activities authorized for Indian Water Rights Settlements by the Claims Resolution Act of 2010 (Public Law 111-291) Title X of the Omnibus Public Land Management Act of 2009 (Public Law 111-11), and the White Mountain Apache Tribe Rural Water System Loan Authorization Act (Public Law 110-390), \$106,151,000, to remain available until expended: Provided, That, of the amount appropriated, the amount for program activities that can be financed by the Reclamation Fund shall be derived from that fund: Provided further, That the unobligated and unexpended balances in "Water and Related Resources," "Reclamation Water Settlements Fund", and "Taos Settlement Fund" authorized by Public Law 111-291, Public Law 110-390, and Title X of Public Law 111-11 may be transferred to the Indian Water Rights Settlements account.

SAN JOAQUIN RESTORATION FUND

For carrying out activities authorized by the San Joaquin River Restoration Settlement Act (Public Law 111-11), \$36,000,000 to remain available until expended.

ADMINISTRATIVE PROVISION

Appropriations for the Bureau of Reclamation shall be available for purchase of not to exceed five passenger motor vehicles, which are for replacement only. (*Energy and Water Development and Related Agencies Appropriations Act*, 2016)

GENERAL PROVISIONS—DEPARTMENT OF THE INTERIOR

- SEC. 201. (a) None of the funds provided in title II of this Act for Water and Related Resources, or provided by previous appropriations Acts to the agencies or entities funded in title II of this Act for Water and Related Resources that remain available for obligation or expenditure in fiscal year [2016] 2017, shall be available for obligation or expenditure through a reprogramming of funds that—
 - (1) initiates or creates a new program, project, or activity;
 - (2) eliminates a program, project, or activity unless the program, project or activity has received no appropriated funding for at least five fiscal years;
 - (3) increases funds for any program, project, or activity for which funds have been denied or restricted by this Act, unless prior [approval is received from] *notice is given to* the Committees on Appropriations of the House of Representatives and the Senate;
 - (4) restarts or resumes any program, project or activity for which funds are not provided in this Act, unless prior [approval is received from] *notice is given to* the Committees on Appropriations of the House of Representatives and the Senate;
 - (5) transfers funds in excess of the following limits, unless prior[approval is received from] *notice is given to* the Committees on Appropriations of the House of Representatives and the Senate:
 - (A) 15 percent for any program, project or activity for which \$2,000,000 or more is available at the beginning of the fiscal year; or
 - (B) \$300,000 for any program, project or activity for which less than \$2,000,000 is available at the beginning of the fiscal year;
 - (6) transfers more than \$500,000 from either the Facilities Operation, Maintenance, and Rehabilitation category or the Resources Management and Development category to any program, project, or activity in the other category, unless prior [approval is received from] *notice is given to* the Committees on Appropriations of the House of Representatives and the Senate; or
 - (7) transfers, where necessary to discharge legal obligations of the Bureau of Reclamation, more than \$5,000,000 to provide adequate funds for settled contractor claims, increased contractor earnings due to accelerated rates of operations, and real estate deficiency judgments, unless prior [approval is received from] *notice is given to* the Committees on Appropriations of the House of Representatives and the Senate.
- (b) Subsection (a)(5) shall not apply to any transfer of funds within the Facilities Operation, Maintenance, and Rehabilitation category.
- (c) For purposes of this section, the term transfer means any movement of funds into or out of a program, project, or activity.
- (d) The Bureau of Reclamation shall submit reports on a quarterly basis to the Committees on Appropriations of the House of Representatives and the Senate detailing all the funds reprogrammed between programs, projects, activities, or categories of funding. The first quarterly report shall be submitted not later than 60 days after the date of enactment of this Act.
- SEC. 202. (a) None of the funds appropriated or otherwise made available by this Act may be used to determine the final point of discharge for the interceptor drain for the San Luis Unit until development by the Secretary of the Interior and the State of California of a plan, which shall conform to the water quality standards of the State of California as approved by the Administrator of the Environmental Protection Agency, to minimize any detrimental effect of the San Luis drainage waters.
- (b) The costs of the Kesterson Reservoir Cleanup Program and the costs of the San Joaquin Valley Drainage Program shall be classified by the Secretary of the Interior as reimbursable or nonreimbursable and collected until fully repaid pursuant to the "Cleanup Program-Alternative Repayment Plan" and the "SJVDP-Alternative Repayment Plan" described in the report entitled "Repayment Report, Kesterson Reservoir Cleanup Program and San Joaquin Valley Drainage Program, February 1995", prepared by the Department of the Interior, Bureau of Reclamation. Any future obligations of funds by the United States relating to, or providing for, drainage service or drainage studies for the San Luis Unit shall be fully

reimbursable by San Luis Unit beneficiaries of such service or studies pursuant to Federal reclamation law.

[SEC. 203. The Reclamation Safety of Dams Act of 1978 is amended by-

- (1) striking "Construction" and inserting "Except as provided in section 5B, construction" in section 3; and
- (2) inserting after section 5A (43 U.S.C. 509a) the following: "SEC. Notwithstanding section 3, if the Secretary, in her judgment, determines that additional project benefits, including but not limited to additional conservation storage capacity, are necessary and in the interests of the United States and the project and are feasible and not inconsistent with the purposes of this Act, the Secretary is authorized to develop additional project benefits through the construction of new or supplementary works on a project in conjunction with the Secretary's activities under section 2 of this Act and subject to the conditions described in the feasibility study, provided a cost share agreement related to the additional project benefits is reach among non-Federal and Federal funding participants and the costs associated with developing the additional project benefits are allocated exclusively among beneficiaries of the additional project benefits and repaid consistent with all provisions of Federal Reclamation law (the Act of June 17, 1902, 43 U.S.C. 371 et seq.) and acts supplemental to and amendatory of that Act.".]

[SEC. 204. Section 5 of the Reclamation Safety of Dams Act of 1978 (43 U.S.C. 509) is amended in the first sentence –

- (a) by inserting "and effective October 1, 2015, not to exceed an additional \$1,100,000,000 (October 1, 2003, price levels)," after "(October 1, 2003, price levels),";
- (b) in the proviso -
 - (1) by striking "\$1,250,000" and inserting "\$20,000,000"; and
 - (2) by striking "Congress" and inserting "Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate"; and
 - (3) by adding at the end of the following: "For modification expenditures between \$1,800,000 and \$20,000,000 (October 1, 2015 price levels), the Secretary of the Interior shall, at least 30 days before the date on which the funds are expended, submit written notice of the expenditures to the Committee on Natural Resources of the House of Representatives and Committee on Energy and Natural Resources of the Senate that provides a summary of the project, the cost of the project, and any alternatives that were considered.".]

[SEC 205. The Secretary of the Interior, acting through the Commissioner of Reclamation, shall –

- (1) complete the feasibility studies described in clauses (i)(I) and (ii)(II) of section 103(d)(1)(A) of Public Law 108-361 (118 Stat. 1684) and submit such studies to the appropriate committees of the House of Representatives and the Senate not later than December 31, 2015;
- (2) complete the feasibility study described in clauses (i)(II) and (ii)(I) of section 103(d)(1)(A) of Public Law 108-361 and submit such studies to the appropriate committees of the House of Representatives and the Senate not later than November 30, 2016;
- (3) complete the feasibility studies described in section 103(f)(1)(A) of Public Law 108-361 (118 Stat. 1694) and submit such study to the appropriate committees of the House of Representatives and the Senate not later than December 31, 2017; and
- (4) provide a progress report on the status of the feasibility studies referred to in paragraphs (1) through (3) to the appropriate committees of the House of Representatives and the Senate not later than 90 days after the date of the enactment of this Act and each 180 days thereafter until December 31, 2017, as applicable. The report shall include timelines for study completion, draft environmental impact statements, final environmental impact statements, and Records of Decision.]

Sec. [206] 203. Section 9504(e) of the Secure Water Act of 2009 (42 U.S.C. 10364(e)) is amended by striking ["\$300,000,000"]"350,000,000" and inserting ["\$350,000,000"]"\$400,000,000".

SEC. [207] 204. Title I of Public Law 108-361 (the CALFED Bay-Delta Authorization Act) (118 Stat. 1681), as amended [by Section 210 of Public Law 111-85], is amended by striking ["2016"]"2017" each place it appears and inserting ["2017"] "2018". (Energy and Water Development and Related Agencies Appropriations Act, 2016)

Appropriations Language for FY 2017

The Department of the Interior Bureau of Reclamation

EXPLANATION OF CHANGES IN APPROPRIATIONS LANGUAGE FISCAL YEAR 2017

BUREAU OF RECLAMATION

Amend the following proviso:

POLICY AND ADMINISTRATION

For expenses necessary for policy, administration, and related functions in the Office of the Commissioner, the Denver office, and offices in the five regions of the Bureau of Reclamation, to remain available until [September 30, 2017, \$59,500,000] expended, \$59,000,000 to be derived from the Reclamation Fund and be nonreimbursable as provided in 43 U.S.C. 377: Provided, That no part of any other appropriation in this Act shall be available for activities or functions budgeted as policy and administration expenses. (Energy and Water Development and Related Agencies Appropriations Act, 2016)

The above proviso is being amended to restablish the fund as a no-year fund.

Add the following proviso:

INDIAN WATER RIGHTS SETTLEMENTS

For carrying out activities authorized for Indian Water Rights Settlements by the Claims Resolution Act of 2010 (Public Law 111-291) Title X of the Omnibus Public Land Management Act of 2009 (Public Law 111-11), and the White Mountain Apache Tribe Rural Water System Loan Authorization Act (Public Law 110-390), \$106,151,000 to remain available until expended: Provided, That, of the amount appropriated, the amount for program activities that can be financed by the Reclamation Fund shall be derived from that fund: Provided further, That the unobligated and unexpended balances in "Water and Related Resources," "Reclamation Water Settlements Fund", and "Taos Settlement Fund" authorized by Public Law 111-291, Public Law 110-390, and Title X of Public Law 111-11 may be transferred to the Indian Water Rights Settlements account.

The above provision is being added to request appropriations to cover expenses associated with the Indian water rights settlements funded in the Claims Resolution Act of 2010 (Public Law 110-291) and the Omnibus Public Land Management Act of 2009 (Public Law 111-11, Title X, Subtitle B) . Having a new account will increase transparency, accountability, and will provide a more favorable treatment under the requirements of sequestration.

Add the following proviso:

SAN JOAQUIN RESTORATION FUND

For carrying out activities authorized by the San Joaquin River Restoration Settlement Act (Public Law 111-11), \$36,000,000 to remain available until expended.

The above provision is being added to request appropriations in FY 2017 for San Joaquin River Restoration Settlement Act activities in the San Joaquin River Restoration Fund. Having a new account will increase transparency and accountability.

GENERAL PROVISIONS—DEPARTMENT OF THE INTERIOR

Amend the following proviso:

SEC. 201. (a) None of the funds provided in title II of this Act for Water and Related Resources, or provided by previous appropriations Acts to the agencies or entities funded in title II of this Act for Water and Related Resources that remain available for obligation or expenditure in fiscal year [2016] 2017, shall be available for obligation or expenditure through a reprogramming of funds that—

- (1) initiates or creates a new program, project, or activity;
- (2) eliminates a program, project, or activity unless the program, project, or activity has received no appropriated funding for at least five fiscal years;
- (3) increases funds for any program, project, or activity for which funds have been denied or restricted by this Act, unless prior [approval is received from] *notice is given to* the Committees on Appropriations of the House of Representatives and the Senate;
- (4) restarts or resumes any program, project or activity for which funds are not provided in this Act, unless prior [approval is received from] *notice is given to* the Committees on Appropriations of the House of Representatives and the Senate;
- (5) transfers funds in excess of the following limits, unless prior [approval is received from] *notice is given to* the Committees on Appropriations of the House of Representatives and the Senate:
 - (A) 15 percent for any program, project or activity for which \$2,000,000 or more is available at the beginning of the fiscal year; or
 - (B) \$300,000 for any program, project or activity for which less than \$2,000,000 is available at the beginning of the fiscal year;
- (6) transfers more than \$500,000 from either the Facilities Operation, Maintenance, and Rehabilitation category or the Resources Management and Development category to any program, project, or activity in the other category, unless prior [approval is received from] *notice is given to* the Committees on Appropriations of the House of Representatives and the Senate; or
- (7) transfers, where necessary to discharge legal obligations of the Bureau of Reclamation, more than \$5,000,000 to provide adequate funds for settled contractor claims, increased contractor earnings due to accelerated rates of operations, and real estate deficiency judgments, unless prior [approval is received from] *notice is given to* the Committees on Appropriations of the House of Representatives and the Senate.
- (b) Subsection (a)(5) shall not apply to any transfer of funds within the Facilities Operation, Maintenance, and Rehabilitation category.
- (c) For purposes of this section, the term transfer means any movement of funds into or out of a program, project, or activity.
- (d) The Bureau of Reclamation shall submit reports on a quarterly basis to the Committees on Appropriations of the House of Representatives and the Senate detailing all the funds reprogrammed

between programs, projects, activities, or categories of funding. The first quarterly report shall be submitted not later than 60 days after the date of enactment of this Act.

The amended proviso will enable Reclamation to financially close projects that have not received appropriated funding in at least five years to enable appropriate use of otherwise "stranded" funds and proposes to modify language requiring approval from and insert notice to the Committees on Appropriations prior to the use of funds.

Delete the following proviso:

[SEC. 203. The Reclamation Safety of Dams Act of 1978 is amended by-

- (3) striking "Construction" and inserting "Except as provided in section 5B, construction" in section 3: and
- (4) inserting after section 5A (43 U.S.C. 509a) the following: "SEC. Notwithstanding section 3, if the Secretary, in her judgment, determines that additional project benefits, including but not limited to additional conservation storage capacity, are necessary and in the interests of the United States and the project and are feasible and not inconsistent with the purposes of this Act, the Secretary is authorized to develop additional project benefits through the construction of new or supplementary works on a project in conjunction with the Secretary's activities under section 2 of this Act and subject to the conditions described in the feasibility study, provided a cost share agreement related to the additional project benefits is reach among non-Federal and Federal funding participants and the costs associated with developing the additional project benefits are allocated exclusively among beneficiaries of the additional project benefits and repaid consistent with all provisions of Federal Reclamation law (the Act of June 17, 1902, 43 U.S.C. 371 et seq.) and acts supplemental to and amendatory of that Act.".]

The above proviso was deleted as language permanently amending an existing law was included in the FY 2016 Consolidated Appropriations Bill; it does not need to be repeated.

Delete the following proviso:

[SEC. 204. Section 5 of the Reclamation Safety of Dams Act of 1978 (43 U.S.C. 509) is amended in the first sentence –

- (c) by inserting "and effective October 1, 2015, not to exceed an additional \$1,100,000,000 (October 1, 2003, price levels)," after "(October 1, 2003, price levels),";
- (d) in the proviso -
 - (4) by striking "\$1,250,000" and inserting "\$20,000,000"; and
 - (5) by striking "Congress" and inserting "Committee on Natural Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate"; and
 - (6) by adding at the end of the following: "For modification expenditures between \$1,800,000 and \$20,000,000 (October 1, 2015 price levels), the Secretary of the Interior shall, at least 30 days before the date on which the funds are expended, submit written notice of the expenditures to the Committee on Natural Resources of the House of Representatives and Committee on Energy and Natural Resources of the Senate that provides a summary of the project, the cost of the project, and any alternatives that were considered.".]

The above proviso was deleted as language permanently amending an existing law was included in the FY 2016 Consolidated Appropriations Bill; it does not need to be repeated.

Delete the following proviso:

[SEC 205. The Secretary of the Interior, acting through the Commissioner of Reclamation, shall –

- (1) complete the feasibility studies described in clauses (i)(I) and (ii)(II) of section 103(d)(1)(A) of Public Law 108-361 (118 Stat. 1684) and submit such studies to the appropriate committees of the House of Representatives and the Senate not later than December 31, 2015;
- (2) complete the feasibility studies described in clauses (i)(II) and (ii)(I) of section 103(d)(1)(A) of Public Law 108-361 and submit such studies to the appropriate committees of the House of Representatives and the Senate not later than November 30, 2016;
- (3) complete the feasibility study described in section 103(f)(1)(A) of Public Law 108-361 (118 Stat. 1694) and submit such study to the appropriate committees of the House of Representatives and the Senate not later than December 31, 2017; and
- (4) provide a progress report on the status of the feasibility studies referred to in paragraphs (1) through (3) to the appropriate committees of the House of Representatives and the Senate not later than 90 days after the date of the enactment of this Act and each 180 days thereafter until December 31, 2017, as applicable. The report shall include timelines for study completion, draft environmental impact statements, final environmental impact statements, and Records of Decision.]

The above proviso was deleted because Reclamation plans to comply with Congressional direction.

Amend the following proviso:

Sec. [206] 203. Section 9504(e) of the Secure Water Act of 2009 (42 U.S.C. 10364(e)) is amended by striking ["\$300,000,000"]"350,000,000" and inserting ["\$350,000,000"] "\$400,000,000".

Reclamation expects to reach and surpass the current ceiling of \$350,000,000 in FY 2017. The above proviso would increase the appropriations ceiling by \$50,000,000, from \$350,000,000 to \$400,000,000, enabling Reclamation to continue activities under Secure Water Act authorities starting early in FY 2017.

Amend the following proviso:

SEC. [207] 204. Title I of Public Law 108-361 (the CALFED Bay-Delta Authorization Act) (118 Stat. 1681), as amended [by Section 210 of Public Law 111-85], is amended by striking ["2016"]"2017" each place it appears and inserting ["2017"] "2018". (Energy and Water Development and Related Agencies Appropriations Act, 2016)

The above proviso is being amended to extend authorization from 2017 until 2018. This will enable Reclamation to continue activities in the New and Expanded Authorities section of the 2014 CALFED Bay-Delta Authorization Act (P.L. 108-361), including the completion of feasibility studies and subsequent post-feasibility study activities. Strikes reference to Section 210 of Public Law 111-85 because extension has been provided in subsequent legislation.

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BENEFIT COST RATIOS AS OF OCTOBER 2017

Project	Direct Benefits	Comment
Animas-La Plata		No benefit-cost ratio was required by the Colorado Ute Settlement Act Amendments of 2000.
Central Arizona Project	1.3	The ratio was computed by using the authorized interest rate of 3.25 percent. The benefit-cost ratio remains the same as in the FY 2010 Budget Justifications.
Central Valley Projects (CVP): American River Division Auburn-Folsom South Unit Folsom Dam Gate Repairs Delta Division Miscellaneous Project Programs Sacramento River Division San Felipe Division San Joaquin Division Trinity River Division Trinity River Restoration West San Joaquin Division San Luis Unit		A benefit-cost ratio is no longer available for the Central Valley Project or any of its divisions and units. Benefit estimates submitted in support of the authorization of the original project features are out of date. Continued indexing of these estimates is inappropriate, and can be misleading. Benefit data for the in-service facilities are not available due to the high cost of collecting data. Recent additions to the list of authorized program activities have been justified on the basis of environmental goals rather than economic benefits. For that reason, benefit-cost ratios do not exist for fish and wildlife restoration and improvement activities authorized since the enactment of the Trinity River Restoration Act (P.L. 98-541, October 24, 1984). For the San Joaquin Division - Benefit-cost ratios are not required for activities authorized under the Central Valley Project Improvement Act, Title XXXIV, P.L. 102-575.
Colorado River Basin Salinity Control Program - Title I		Assessment of full beneficial impact of improving water quality as a result of this authorized project has not been made. Agreements with the Mexican Government concerning salinity control in the Colorado River and P.L. 93-320 authorizing Title I and Title II activities are based upon social and political justifications.
Colorado River Basin Salinity Control Program - Title II Basinwide Program		The Title II SCP is designed to meet the objectives of the Colorado River Basin Water Quality Standards and to reduce economic salinity damages currently estimated to be about \$366 million per year. P.L. 98-569, an amendment to the Salinity Control Act, PL 93-320, required preference be given to those projects that reduced salinity at the least cost. P.L. 104-20, an amendment to the Act, authorized Reclamation through the Basinwide Program, based on competitive process open to the public, to solicit, rank, select, and award grants to new salinity control projects sponsored by non-Federal entities.
Columbia/Snake River Salmon Recovery Project		Not applicable since benefits are intangible.
Deschutes Ecosystem Restoration Project		Not applicable since benefits are intangible.

BENEFIT COST RATIOS AS OF OCTOBER 2017

Project	Direct Benefits	Comment
Fort Peck Reservation/Dry Prairie Rural Water System		Not required under authorizing legislation, P.L. 106-382.
Lewis and Clark Rural Water Supply		Not required under authorizing legislation, P.L. 106-246.
Mid-Dakota Rural Water Project		Not required under authorizing legislation, P.L. 102-575.
Minidoka Northside Drain Water Management Project		Not Applicable. Action provides for environmental compliance on an existing project.
Mni Wiconi Project		Not required under authorizing legislation, P.L. 100-516.
Navajo Gallup Water Supply Project	1.25	The benefit-cost ratio calculation was included in the 2009 Planning Report and Final Environmental Impact Statement.
Pick-Sloan Missouri Basin Project Garrison Diversion Unit		Benefit-cost ratio has not been calculated since the passage of the Dakota Water Resources Act of 2000.
Rocky Boy's/North Central Montana Rural Water System		Not required under authorizing legislation, P.L. 107-331.
Yakima River Basin Water Enhancement Project		No benefit-cost ratio was required during authorization of the project.

LAND CERTIFICATION 2017

Project	Original Certification	Additional Information
Animas-La Plata	1/19/82	The Colorado Ute Settlement Act Amendments of 2000 authorizes the construction of only those facilities necessary to divert and store water for municipal and industrial uses. Construction of any other project features authorized under P.L. 90-537 (such as irrigation) shall not be commenced without further express authorization from Congress. As of FY 2013 construction is complete.
Central Arizona Project	4/16/73	The project wide land certification was completed on April 16, 1973. During project construction, supplemental land certifications were completed on lands not included in the original project wide certification. As of July 20, 1998, sufficient land has been certified on the Gila River Reservation to satisfy the requirement for delivery of Central Arizona Project (CAP) water. Final land certification on San Xavier Existing Farm Rehabilitation was completed in 1990 and the Existing Farm Extension was completed in 2005. Final land classification for the San Carlos Apache system is now planned for FY 2018 due to an extension in the completion of planning work. Land certifications for the remaining Indian reservation will be scheduled as required.
Central Valley Projects (CVP): American River Division		
American River Division Auburn-Folsom South Unit Folsom Dam Gate Repairs	7/20/67 7/20/67	Land Classification Certification includes Auburn-Folsom South Unit, Foresthill, and Sly Park Unit.
Delta Division	7/23/82	Land Classification Certification includes Banta-Carbona Irrigation District, Broadview Water District, Contra Costa County Water District, Laguna Water District, Patterson Water District, Plain View Water District, Solado Water Districts (05/19/95), Sunflower Water District (05/19/95), and West Stanislaus Water District (11/8/96). In Banta-Carbona Irrigation District, field work is completed; the report was completed and certified on 04/99. Patterson Water District was completed in 08/97 and certified 08/99. Del Puerto Irrigation District field work is completed; the report was completed and certified in 07/01. Mendota Districts: Coehlo Family Trust field work completed 03/02; Eagle Field Water District field work completed 06/04; Fresno Slough field work completed 04/02; James Irrigation District field work completed in 2002; Laguna Water District field work completed 06/04; Traction Ranch, Melvin Hughes (Mendota Pool) field work completed 04/02; Mercy Springs
Central Valley Projects (Cont.) Delta Division (Cont.)		Water District No. 1606 field work completed 07/02; Tranquility Irrigation District field work completed 04/02; Widren Water District field work completed 06/04; and Oro Loma Water District field work completed 06/04.

LAND CERTIFICATION 2017

East Side Division		New Melones
Friant Division	Various dates (Beginning with 1/13/50 and going to May 1996)	Land Classification Certification includes Atwell Island Water District, Cross Valley Canal, Globe Water District, Hills Valley Irrigation District, Tri-Valley Irrigation District, Friant-Kern Canal, Madera Irrigation District (01/94), Arvin-Edison Water Storage District, Delano-Earlimart Irrigation District, Exeter Irrigation District (7/29/91), Fresno Irrigation District (12/23/94), Garfield Water District, Lewis Creek Unit, Ivanhoe Irrigation District (10/90), Kern-Tulare Water District (01/96), Lindmore Irrigation District (03/91), Lindsay-Strathmore Irrigation District, Orange Cove Irrigation District, Pixley Irrigation District (08/94), Porterville Irrigation District, Saucelito Irrigation District, Shafter-Wasco Irrigation District, Stone Coral Irrigation District (07/91), Tea Pot Dome Water District (01/96), Terra Bella Irrigation District, Chowchilla Water District (10/91) and Reclassified (07/98), LaBranza Water District, Gravelly Ford Water District (09/95), International (12/95), Lower Tule River Irrigation District (08/95), Rag Gulch Water District (09/95), and Tulare Irrigation District (12/95). Extended Service Area 12/22/80. Land Classification Certification includes Feather Water
Miscellaneous Project Programs	6/4/82	District, Upper Stony Creek, Stony Creek, Glenn Valley Water District, Glide Water District,
Sacramento River Division	5/3/56	Westside Water District, Tehama-Colusa Canal, Kanawha Water District, and Orland-Artois Water District, Yolo-Zamore and Dunnigan area (10/90).
San Felipe Division	8/20/75	Hollister and Santa Clara in 1975 and Watsonville on 1/19/79. Land Certification includes Watsonville Subarea and Hollister and Santa Clara Subareas.
Trinity River Division	7/24/64	Land Classification Certification includes Bella Vista Water District (12/90), Clear Creek South Unit (07/64), and Cow Creek Unit (07/62).
West San Joaquin Division San Luis Unit	5/11/62	Above Elevation 470 - 2/14/79. Land classification Certification includes San Luis Water Dist., Westlands Water District (10/91), Panoche Water District, and Pleasant Valley Water District.
Columbia Basin Project	8/11/52 & 4/7/76	
Pick-Sloan Missouri Basin Project Garrison Diversion Unit	March 1966	Lands included in the 250,000-acre plan were certified for gravity irrigation in March 1966. Recertification is required on those lands that are a part of the 75,000 acre plan because of change from gravity to sprinkler irrigation. The 5,000 acres for the Oakes Test Area were recertified in April 1981. Further progress on land certification is on hold as a result of the Dakota Water Resources Act of 2000, except for the 2,380 acres on the Standing Rock Indian Reservation and for a few existing irrigated areas which are seeking preferred power.

PN REGION	Irris	gation	Pov	wer	Flood C	Control	M&I		F&		Water	Control	Recre	eation	LRI	 И		perating enses		etal ations	C/O	Project ' Feder	
Projects	FY 2016	FY 2017					FY 2016 FY	2017	T											T		FY 2016	
Boise Area Projects	857	742	7,962	7,774	589	620	0	0	903	464	400	538	1,170	1,287	1,785	1,837	0	0	13,666	13,262	1 2010	112010	11 201.
Federal	84	89	7,502		589	620			881	440	400	498	1,170	1,187	1,785	1,837			4,909	4,671		4,909	4,671
Water Users	773	653							19	5	0	0		1,107	2,700	2,007			792	658		1,505	
Other Agencies	770		7,962	7,774	0	0			3	19	0	40		100	0	0			7,965	7,933			
			7,502	7,7.7 -															.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,500			
Columbia Basin-Grand Coulee	13,570	10,307	185,453	197,718	3,963	4,660	23	27	2,315	2,633	0	0	0	0	250	250	0	0	205,574	215,595			
Federal	369	0	2,880	2,047	3,963	4,660	23	27	2,315	2,633		0		0	200	200	0	0	9,750	9,567		9,750	9,567
Water Users	13,201	10,307		0		0		0		0		0		0		0			13,201	10,307		2,700	
Other Agencies	10,201	20,00	182,573	195,671		0		0		0		0		0	50	50			182,623	195,721			
other rigeneres			102,070	170,071															102,020	170,721			
Columbia Basin-Ephrata	2,806	2,795	0	0	666	282	107	110	26	20	443	354	379	337	3,100	3,269	0	0	7,527	7,167			
Federal	364	353	0	0	666	282	107	110	26	20	418	324	379	337	3,100	3,269		0	5,060	4,695		5,060	4,695
Water Users	2,442	2,442		0		0		0		0	0	0		0	0	0		0	2,442	2,442			
Other Agencies		0		0		0				0	25	30		0	•	0	***************************************	0	25	30			
_																							
Crooked River Project	0	0	0	0	174	190	0	0	82	86	82	104	477	489	153	132	0	0	968	1,001			
Federal					174	190		0	82	86	82	79	301	313	153	132		0	792	800		792	800
Water Users																			0	0			
Other Agencies												25	176	176					176	201			
_																							
Deschutes Project	0	0	0	0	50	49	0	0	113	100	172	169	118	121	162	173	0	0	615	612			
Federal					50	49	0	0	113	100	140	129	118	121	162	173			583	572		583	572
Water Users									0	0	0	0							0	0			
Other Agencies											32	40							32	40			
Eastern Oregon Projects	0	0	0	0	158	170	0	0	371	419	200	165	52	42	110	97	0	0	891	893			
Federal					158	170			261	309	150	140	52	42	110	97			731	758		731	758
Water Users									10	10			0	0					10	10			
Other Agencies									100	100	50	25			0	0			150	125			
Hungry Horse Project	0	0	10,944	12,131	310	372	0	0	56	68	0	0	56	68	0	0	0	0	11,366	12,639			
Federal			0	0	310	372			56	68	0	0	56	68					422	508		422	508
Water Users																			0	0			
Other Agencies			10,944	12,131															10,944	12,131			
Lewiston Orchards Project	0	0	0	0	20	17	0	0	547	3,534	50	39	0	0	35	40	0	0	652	3,630			
Federal					20	17			537	3,509	50	39	0	0	35	40			642	3,605		642	3,605
Water Users									10	25	0	0	0	0					10	25			
Other Agencies																			0	0			
Minidoka Area Projects	1,868	1,797	9,629	14,729	1,394	1,427	n		779	922	470	450	627	573	1,343	1,423	Λ	0	16,110	21,321			
Federal	1,000	5	9,029	14,149 N	1,394	1,427	U	-	779	922	470	450	627	573	1,343	1,423	J	U	4,618	4,800		4,618	4,800
	1,863	1,792		U	1,374	1,44/			0	744 N	4/0	430	U41	313	1,343	1,443			1,863	1,792		7,010	,000
Water Users Other Agencies	1,003	1,/94	9,629	14 720					U	U										<u> </u>			A0000000000000000000000000000000000000
Other Agencies			9,049	14,729															9,629	14,729			

			I		1				I		I						Non-Ope	rating		tal			t Total
PN REGION		gation	Pov		Flood (M	[F&		Water (Recrea		1	RM	Expen			ations	C/O		eral
Projects	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Rogue River, Talent Division	0	561	1,413	1,513	269	460	0	0	2,062	1,268	258	195	562	700	195	183	0	0	4,759	4,880			-
Federal		561			269	265			2,062	1,268	183	145	362	415	195	183			3,071	2,837		3,071	2,837
Water Users						195			0	0	0	0	0	0					0	195			
Other Agencies			1,413	1,513							75	50	200	285					1,688	1,848			
Tualatin Project	274	247	0	0	25	25	39	39	100	182	41	38	79	276	66	83	0	0	624	890			
Federal	74	47			25	25	39	39	100	182	41	38	79	176	66	83			424	590		424	590
Water Users	200	200			0	0	0	0			0	0	0	0					200	200			
Other Agencies													0	100					0	100			
Umatilla Project	693	737	0	0	241	227	0	0	920	897	815	732	96	94	345	297	0	0	3,110	2,984			
Federal	573	603			241	227			920	897	815	732	96	94	345	297			2,990	2,850		2,990	2,850
Water Users	120	134			0	0			0	0	0	0							120	134			
Other Agencies																			0	0			
Washington Area Projects	0	0	0	0	60	64	0	0	40	90	85	74	54	30	236	265	0	0	475	523			
Federal					60	64			40	90	85	74	54	30	236	265			475	523		475	523
Water Users											0	0							0	0			
Other Agencies																			0	0			
Yakima Project	2,024	2,050	5,748	3,312	1,223	1,408	0	0	5,483	4,443	265	180	56	56	475	390	0	0	15,274	11,839			
Federal	839	812	0	0	618	618			5,368	4,328	215	140	56	56	475	390			7,571	6,344		7,571	6,344
Water Users	1,185	1,238							0	0									1,185	1,238			
Other Agencies			5,748	3,312	605	790			115	115	50	40							6,518	4,257			
Total Obligations	22,092	19,236	221,149	237,177	9,142	9,971	169	176	13,797	15,126	3,281	3,038	3,726	4,073	8,255	8,439	0	0	281,611	297,236			
Total Federal	2,308	2,470	2,880	2,047	8,537	8,986	169	176	13,540	14,852	3,049	2,788	3,350	3,412	8,205	8,389	0	0	42,038	43,120		42,038	43,120
Total Water Users	19,784	16,766	0	0	0	195	0	0	39	40	0	0	0	0	0	0	0	0	19,823	17,001			
Total Other Agencies	0	0	218,269	235,130	605	790	0	0	218	234	232	250	376	661	50	50	0	0	219,750	237,115			
% of Appropriated Funds	5.4%	5.7%	6.7%	4.7%	19.8%	20.8%	0.4%	0.4%	31.4%	34.4%	7.1%	6.5%	7.8%	7.9%	19.0%	19.5%	0.0%	0.0%	100.0%	100.0%			
1/ Reflects O&M during Construc	ction, Safety o	of Dams, etc.																					

																	Non-Operating	To	tal	1	Project	Total
MP REGION	Irrigati	ion	Powe	er	Flood (Control	M&I		F&V	7	Water Contr	ol	Recre	ation	L	RM	Expenses 1/	Oblig		C/O	Fede	
Projects	FY 2016 FY		FY 2016 F	Y 2017	FY 2016	FY 2017	FY 2016 FY	2017	FY 2016 F		FY 2016 FY 20	<u>-</u>	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 FY 2017		FY 2017	FY 2016		
Cachuma Project	678	678	0	0	0	0	643	643	0	0	0	0	0	0	0	0	0	0 1,321	1,321	-		
Federal	678	678		0	0	0	643	643	0	0	0	0	0	0	0	0	0	0 1,321	1,321	541	780	1,321
Water Users																		0	0			
CVP, American River Division	4,877	7,420		7,945				701		0	17	31	152	0	0	0	0	0 16,433			40.0=4	40.46
Federal	4,877	7,420		1,821	876	492	554	701	1,820	U	17	31	152	0	U	O O	0	0 10,715			10,371	10,465
Water Users			5,718	6,124														5,718	6,124			
CVP, Auburn-Folsom	1,326	1,248	327	307	88	84	126	119	336	317	6	6	11	10	0) 0	0	0 2,219	2,091			
Federal	1,326	1,248	327	307		84		119		317	6	6	11	10	0	0	0	0 2,219			2,210	2,091
Water Users																		0	0		,	
CVP, Delta Division	5,111	7,147	2,533	1,757	919	472	581	681	1,908	889	18	33	159	0	0	0	0	0 11,229	10,979			
Federal	5,111	7,147	2,533	1,757	919	472	581	681	1,908	889	18	33	159	0		0	0	0 11,229	10,979	17	11,212	10,979
Water Users																	0	0	0			
				A 0.5					-0.5							-						
CVP, East Side Division	1,849	1,791	2,916	2,987	332	322		203		668		6	58			0	0	0 6,062			4.040	2.024
Federal	1,849	1,791	916	2 100	332	322	210	203	690	668	6	6	58	57		0	0	4,062	3,934 2,100		4,043	3,934
Water Users			2,000	2,100														2,000	2,100			
CVP, Friant Division	2,546	2,488	1,262	1,233	458	448	289	282	950	928	g	9	79	77	0		0	0 5,593	5,465			
Federal Federal	2,546	2,488		1,233		448		282		928		9	79	77			0	0 5,593			3,187	5,465
Water Users																		0	0			
CVP, Misc. Proj. Programs	3,664	2,632	1,816	651	658	172	416	253	1,368	5,326	13	9	114	0	0	0	0	0 8,050	9,043			
Federal	3,664	2,632	1,816	651	658	172	416	253	1,368	5,326	13	9	114	0		0	0	0 8,050	9,043	28	8,022	9,043
Water Users																		0	0			
																_	_					
CVP RAX Program	9,223	7,448		13,691	1,657	1,338		846		2,780	32	26	288	233		0	0	0 31,712			20.252	1606
Federal	9,223	7,448	4,571	3,691	1,657	1,338	1,048	846	3,443	2,780	32	26	288	233	U	0	0	0 20,262			20,253	16,362
Water Users			11,450	10,000														11,450	10,000			
CVP, Sacramento Rvr. Div.	1,025	676	508	166	184	46	116	64	382	1,045	4	4	32	0	0		0	0 2,251	2,001			
Federal	1,025	676		166		46		64		1,045	4	4	32	0		0	0	0 2,251			2,243	2,001
Water Users																		0	0			
CVP, San Felipe Division	89	69	0	0	0	0	313	245	23	16	0	0	22	16	0	0	0	0 447	346	-		
Federal	89	69		0		0	313	245	23	16	0	0	22	16		0	0	0 447	346	19	428	346
Water Users																		0	0			
					1.2.		0.50															~
CVP, San Luis Unit West SJD	7,511	6,228		0	1,350	417		594 504		1,579		27	234	27		0	0	0 16,500			15 740	0 073
Federal Water Users	7,511	6,228	3,722	U	1,350	417	853	594	2,803	1,579	26	27	234	27		U	U	0 16,500	8,872	758	15,742	8,872
Water Osers																		U	U			
CVP, Shasta Division	4,269	3,423	11,016	10,142	767	231	485	324	1,593	4,411	15	19	133	0	0	0	0	0 18,278	18,550			
Federal	4,269	3,423		842		231		324		4,411		19	133	0		0	0	0 9,378			9,324	9,250
Water Users			8,900	9,300													0	0 8,900				
CVP, Trinity River Division	7,960	6,491	8,825	7,137	1,430	434		607	2,971	8,174	28	35	248		0	0	0	0 22,366	22,895			
Federal	7,960	6,491		1,597	1,430	434	904	607	2,971	8,174	28	35	248	17		0	0	0 17,486			17,472	17,355
Water Users	0	0	4,880	5,540														4,880	5,540			
CVD VV 0 D C	(FOC		10.040	44 4 7 ^	4 800	4 400	8 /4		0.511	0.460	24		210	A 2.7				22 222	20.110	,		
CVP, Wtr & Power Opertn.	6,729	6,614	10,943	11,160				751 751		2,469		24	210 210			0	U	0 22,390			14 770	14 522
Federal Water Users	6,729	6,614	3,335 7,608	3,279 7,881	1,209	1,189	/04	/31	2,511	2,469	24	24	210	206		U	U	0 14,782 7,608			14,778	14,532
Trace USCIS			7,000	7,001														7,000	7,001	-		
L			wood of the state								1					1		1				

	Irrigation P																Non-Operating	Tot	al		Project	Total
MP REGION	Irriga	ation	Powe	er	Flood (Control	M	&I	F&V	W	Water Con	itrol	Recre	eation	LR	M	Expenses 1/	Obliga	tions	C/O	Fede	ral
Projects	FY 2016	FY 2017	FY 2016 F	Y 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 F	FY 2017	FY 2016 FY	2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 FY 2017	FY 2016	FY 2017	FY 2016	FY 2016 I	SY 2017
Klamath Project	2,894	2,712	0	0	0	0	541	508	14,323	12,732	0	0	0	0	1,742	1,548	0	0 19,500	17,500			
Federal	1,634	1,452		0		0	301	268	14,323	12,732		0	0	0	1,742	1,548	0	0 18,000	16,000	93	17,907	16,000
Water Users	1,260	1,260					240	240										1,500	1,500			
Lahontan Basin Projects	460	462	1,009	1,013	0	0	2,383	2,395	938	943	0	0	50	50	5,162	5,188	0	0 10,001	10,051			
Federal	460	462	809	813		0	2,383		938	943	0	0	50	50	5,162	5,188	0	0 9,801	9,851	52	9,749	9,851
Water Users			200	200														200	200			
Orland Project	0	0	0	0	0	0	0	0	0	0	0	0	930	930	0	0	0	0 930	930			
Federal		0		0		0		0		0		0	930	930		0	0	0 930	930	2	928	930
Water Users																		0	0			
Solano Project	1,196	1,196	0	0	46	46	19	19	112	112	0	0	1,821	1,821	502	502	0	0 3,696	3,696			
Federal	1,196	1,196	0	0	46	46	19	19	112	112	0	0	1,821	1,821	502	502	0	0 3,696	3,696	94	3,602	3,696
Water Users																		0	0			
Ventura River Project	0	0	0	0	0	0	0	0	0	0	0	0	0	0	346	346	0	0 346	346			
Federal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	346	346		346	346	3	343	346
Water Users																		0	0			
Total Obligations	61,407	58,723	69,033	58,189	9,975	5,691	10,245	9,235	36,171	42,389	199	229	4,541	3,444	7,752	7,584	0	0 199,323	185,484			
Total Federal	60,147	57,463	28,277	17,044	9,975	5,691	10,005	8,995	36,171	42,389	199	229	4,541	3,444	7,752	7,584	0	0 157,067	142,839	4,474	152,593	142,839
Total Water Users	1,260	1,260	40,756	41,145	0	0	240	240	0	0	0	0	0	0	0	0	0	0 42,256	42,645			
% of Appropriated Funds	42.1%	40.2%	19.8%	11.9%	7.0%	4.0%	7.0%	6.3%	25.3%	29.7%	0.1%	0.2%	3.2%	2.4%	5.4%	5.3%	0.0% 0.09	102.9%	100.0%			
1/ Reflects O&M during Construct	ion, Safety of	Dams, etc	•																			

	Irrigation Power F						1		1		1		1				Non-Oper	rating	To	tal		Projec	t Total
LC REGION	Irrig	ation	Pow	ver	Flood	Control	M&1	[F&V	V	Water	Control	Recrea	tion	LF	RM	Expense	es 1/	Obliga	ations	C/O	Fed	leral
Projects	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 H	FY 2017	FY 2016 1	FY 2017	FY 2016 F	FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017						
Ak Chin Water Rts Stlmnt	15,341	15,735	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15,341	15,735			
Federal	15,341	15,735																	15,341	15,735		15,341	15,73
Water Users																			0	0			
CAP Distribut Sys O&M	6,843	6,711	0	0	0	0	0	0	0	0	0	0	0	0	386	386	0	0	7,229	7,097			
Federal	6,692	6,534											0	0	386	386			7,078	6,920		7,078	6,92
Water Users	151	177											0	0					151	177		·	
CRBSCP, Title I	0	0	0	0	0	0	0	0	0	0	14,170	15,453	0	0	0	0	0	0	14,170	15,453			
Federal	•				•						14,170	15,453							14,170	15,453		14,170	15,45
Water Users											0	0							0	0			
Parker-Davis Project	0	0	14,981	15,297	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14,981	15,297			
Federal	•																		0	0		0	
Water Users	0	0	14,981	15,297															14,981	15,297			
Salt River Project	250	250	0	0	0	0	0	0	0	0	0	0	0	0	942	856	0	0	1,192	1,106			
Federal	250	250													649	649			899	899	•	899	89
Water Users															293	207			293	207			
Yuma Area Projects	1,474	1,465	0	0	23,424	23,750	0	0	898	922	0	0	0	0	887	896	0	0	26,683	27,033			
Federal	1,324	1,315			22,855	23,181			898	922					887	896			25,964	26,314		25,964	26,31
Water Users	150				569	569													719	719			
Total Obligations	23,908	24,161	14,981	15,297	23,424	23,750	0	0	898	922	14,170	15,453	0	0	2,215	2,138	0	0	79,596	81,721			
Total Federal	23,607	23,834	0	0	22,855	23,181	0	0	898	922	14,170	15,453		0		1,931	0	0	63,452	65,321		63,452	65,32
Total Water Users	301	327	14,981	15,297	569		0	0	0	0	0	0	0	0		207	0	0	16,144	16,400			
Total Other Federal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
% of Appropriated Funds	36.1%	36.5%	0.0%	0.0%	35.0%	35.5%	0.0%	0.0%	1.4%	1.4%	21.7%	23.7%	0.0%	0.0%	2.9%	3.0%	0.0%	0.0%	100.0%	100.0%			

																Non-Operating	To	tal		Projec	t Total
LC REGION	Irrigation	Po	wer	Flood C	ontrol	M	[&I	F8	&W	Water (Control	Recreation	on	LF	RM	Expenses 1/	Oblig	ations	C/O	Fed	eral
Projects	FY 2016 FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 FY	Y 2017	FY 2016	FY 2017	FY 2016 FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Permanent O&M																					
Boulder Canyon Project		103,977	103,082														103,977	103,082			
Federal																					
Water Users																	0	0			
Permanent O&M																					
Appropriations		103,977	103,082														103,977	103,082			

Total Federal/O&M	23,607 23,834	103,977	103,082	22,855	23,181	0	0	898	922	14,170	15,453	0	0	1,922	1,931	0 0	167,429	168,403	0	63,452	65,321
1/ Reflects O&M during Con	nstruction, Safety of	Dams, etc.																			

							Operating	g Expenses								Non-Op	erating	Tot	tal			
UC REGION	Irrig	gation	Po	wer	Flood (Control	M&I	F&	W	Water (Control	Recre	ation	LRN	<u>/I</u>	Expen		Obliga	ations	C/O		
Projects		<u>-</u>	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	-		FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Animas-La Plata Project	0	0	0	0	0	0	0 0	300	324	1,943	1,983	202	103	188	96	259	146	2,892	2,652			
Federal								300	324	1,943	1,983		103	188	96	259	146		2,652	740	2,152	2,652
Water Users																		0	0			
Balmorhea Project	0	0	0	0	0	0	0 0	26	27	14	13	0	0	0	0	0	0	40	40			
Federal					•			26	27	14	13							40	40	14	26	40
Water Users																		0	0			
Bonneville Unit,CUP	0	0	0	0	1,375	1,652	0 0	0	0	270	300	60	64	522	522	137	237	2,364	2,775			
Federal					1,375	1,652				270	300	60	64	522	522	137	237	2,364	2,775	76	2,288	2,775
Water Users																		0	0			
Bostwick Park Project	0	0	0	0	0	0	0 0	0	0	235	229	0	0	45	48	0	0	280	277			
Federal					***************************************			-		235	229	•		45	48			280	277	77	203	277
Water Users																		0	0			
Carlsbad Project	0	0	0	0	1,283	1,181	0 0	2,475	2,530	164	170	54	56	226	265	0	0	4,202	4,202			
Federal					1,283	1,181		2,475	2,530	101	107	54	56	226	265			4,139	4,139	87	4,052	4,139
Water Users										63	63							63	63			
Collbran Project	0	0	675	748	0	0	0 0	0	0	1,128	1,321	4	4	114	116	0	0	1,921	2,189	***************************************		
Federal			675	748						1,128	1,321		4	114	116			1,921	2,189	291	1,630	2,189
Water Users																		0	0			
Dallas Creek Project	0	0	0	0	0	0	0 0	0	0	363	340	0	45	85	58	0	0	448	443			
Federal										363	340	0	45	85	58			448	443	122	326	443
Water Users																		0	0			
Dolores Project	0	0	0	0	0	0	0 0	0	0	1,363	1,483	0	0	99	111	0	0	1,462	1,594	•		
Federal										1,072	1,176			99	111			1,171	1,287	150	1,021	1,287
Water Users																						
Other Agencies										291	307							291	307			
Eden Project	0	0	0	0	0	0	0 0	0	0	142	142	0	0	158	180	0	0	300	322			
Federal								-		142	142			158	180	-		300	322	12	288	322
Water Users																		0	0			
Emery County Project	0	0	0	0	0	0	0 0	0	0	187	256	0	0	122	122	0	0	309	378			
Federal										187	256			122	122			309	378	28	281	378
Water Users																		0	0			

							Ol	perating	g Expenses								Non-O	perating	To	tal			
UC REGION	Irrig	ation	Pow	er	Flood C	ontrol	M&I		F&	: W	Water (Control	Recr	eation	LR	2M	Expe	nses 1/	Obliga	ations	C/O		
Projects	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 FY	Y 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Florida Project	0	0	0	0	0	0	0	0	0	0	295	291	0	0	55	56	0	0	350	347			
Federal											295	291			55	56			350	347	64	286	347
Water Users																			0	0			
Fruitgrowers Dam Project	0	0	0	0	0	0	0	0	0	0	177	167	0	15	62	55	0	0	239	237			
Federal											177	167	0	15	62	55			239	237	60	179	237
Water Users																			0	0			
Grand Valley, CRBSCP	0	0	864	910	0	0	0	0	0	0	3,142	1,541	0	0	127	127	0	0	4,133	2,578			
Federal			864	910							2,218	914			127	127			3,209	1,951	497	2,712	1,951
Water Users																							
Other Agencies											924	627	-						924	627			
Hammond Project	0	0	0	0	0	0	0	0	0	0	138	123	0	0	18	13	0	0	156	136			
Federal											138	123			18	13			156	136	16	140	136
Water Users													***************************************		***************************************		***************************************		0	0	***************************************		
													***************************************		***************************************		***************************************		•		***************************************	•••••	
Hyrum Project	0	0	0	0	0	0	0	0	0	0	207	206	0	0	148	148	0	0		354			
Federal											207	206	0	0	148	148			355	354	16	339	354
Water Users																			0	0			
Jensen Unit, CUP	0	0	0	0	0	0	0	0	0	0	256	254	0	0	169	169	0	0	425	423			
Federal											256	254	0	0	169	169			425	423	27	398	423
Water Users																			0	0			
													•										
Lyman Project	0	0	0	0	0	0	0	0	0	0	248	246	0	0	14	14	0	0	262	260			
Federal											248	246			14	14			262	260	10	252	260
Water Users																			0	0			
Manage Project	0	0	0	Λ	0	0	0	0	0	Δ	259	281	0	0	37	30	0	0	296	311			
Mancos Project Federal	U	U	U	U	U	U	U	U	U	U	259	268	U	U	37	30	U	U	283	298	86	197	298
Non-Federal											13	13			31	30			13	13	00	171	270
1 WII-I CUCI AI											13	13							13	13			
Middle Rio Grande Project	0	0	0	0	0	0	0	0	13,073	14,507	11,896	12,323	23	24	424	436	0	0	25,416	27,290			
Federal			-		-		-		11,648	13,082	11,896	12,323	23		424	436			23,991	25,865	1,269	22,722	25,865
Water Users									1,425	1,425	′								1,425	1,425			
Moon Lake Project	0	0	0	0	0	0	0	0	0	0	86	84	0	0	9	9	0	0	95	93			
Federal											86	84			9	9			95	93	9	86	93
Water Users																			0	0			

							Operatir	g Expenses								Non-Op	perating	То	tal			
UC REGION		ation		ower	-	Control	M&I		&W	Water (Recrea		LRM		Expen		Oblig		C/O		T
Projects	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Navajo Unit, CRSP (SEC 5 & 8)	0	0	0	0	0	0	0 0	0	0	83	70	479	801	0	0	0	0	562	871			
Federal										83	70	247	569					330	639	30	300	639
Water Users																						
Non-Federal												232	232					232	232			
Other Agencies																						
Newton Project	0	0	0	0	0	0	0 0	0	0	75	95	0	0	50	29	0	0	125	124			
Federal										75	95			50	29			125	124	28	97	124
Water Users																		0	0			
Ogden River Project	0	0	0	0	0	0	0 0	0	0	266	256	0	0	218	218	0	0	484	474			
Federal										266	256			218	218			484	474	18	466	47 4
Water Users																		0	0			
Paonia Project	0	0	0	0	160	152	0 0	0	n	144	135	9	0	91	83	0	0	404	379			
Federal	U	U	U	U	160	152		U	U	144	135	3	3	91	83		U	398	373	56	342	373
Water Users					100	132					133	6	6	71				6	6	30	342	313
Non-Federal												U	U					U	U			
Other Agencies																						
Other Agencies																					-	
Paradox Unit, CRBSCP	0	0	0	0	0	0	0 0	0	0	5,237	5,000	0	0	34	42		0	5,271	5,042			
Federal										3,938	3,357			34	42			3,972	3,399	515	3,457	3,399
Water Users																						
Other Agencies										1,299	1,643							1,299	1,643			
Pecos River Basin Water Sal	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0			
Federal																		0	0		0	0
Water Users																		0	0			
Pine River	0	0	1 0	0	-	0	0 0	0	0	360	336	15	14	118	94	0	0	493	444			
Federal	- V									360	336	15	14	118	94			493	444	60	433	444
Water Users										200				110				170				
Other Agencies																						
o their rigencies																						
Preston Bench	0	0	0	0	0	0	0 0	0	0	8	8	0	0	4	4	0	0	12	12			
Federal									-	8	8	-		4	4	-	_	12	12	4	8	12
Water Users																		0	0			
Provo River Project	0	0	295	300		0	0 0	1,510	1,515	443	446	29	29	331	331	0	0	2,608	2,621			
Federal			295					640	645	443	446	29	29	331	331			1,738	1,751	40	1,698	1,751
Water Users											- • •							_,	-, · • -		_,~~	
Other Agencies								870	870									870	870			
Rio Grande Project	501	483	3,276	1,797		0	0 0	421	396	3,089	2,590	0	0	620	623	0	0	7,907	5,889			
Federal	301	703	3,276			U		421	396	3,089	2,590	U	U	620	623		U	7,406	5,406	168	7,238	5,406
Water Users	501	483		1,191				741	390	3,007	4,370			020	023			501	483	100	1,430	3,400
Water USCIS	301	403	_					_1						I				301	403		ļ	

						Operatin	g Expenses								Non-O	perating	Tota	al			
UC REGION	Irriga	tion	Power	Flood Control	M&		F&W	7	Water (Control	Recre	eation	LR	RM		nses 1/	Obliga	tions	C/O		
Projects	FY 2016	FY 2017	FY 2016 FY 2017	7 FY 2016 FY 2017	FY 2016	FY 2017	FY 2016 F	Y 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
San Juan-Chama Project	0	0	0	0 0	1,471	1,436	56	35	488	505	20	23	67	59	0	0	2,102	2,058			
Federal							56	35	488	505	20	23	67	59			631	622	36	595	622
Water Users					1,471	1,436											1,471	1,436			
San Luis Valley, Closed Basin	0	0	0 (0 0	0	0		208	3,684	3,677	0	0	36	38	0	0		3,923			
Federal							224	208	3,684	3,677			36	38			3,944	3,923	146	3,798	3,923
Water Users																	0	0			
Sanpete Project	0	0	0	0 0	0	0	0	0	70	70	0	0	0	0	0	0	70	70	10	50	=^
Federal									70	70							70	70	18	52	70
Water Users																	0	<u> </u>			
San Luis Valley, Conejos	0	0	0 (0 0 0	0	0	0	0	56	74	0	0	0	3	0	0	56	77			
Federal									56	74			0	3			56	77	8	48	77
Water Users																	0	0			
Scofield Project	0	0	0	0 0 0	0	0	14	14	124	126	37	37	498	418	20	20		615			
Federal							14	14	124	126	37	37	498	418	20	20	693	615	26	667	615
Water Users																	0	0			
Seedskadee Unit	0	0	0 (0 0 0	0	0	0	0	85	85	0	0	14	14	0	0	99	99			
Federal									85	85			14	14			99	99	53	46	99
Water Users																	0	0			
Silt Project	0	0	0 (0 0	0	0	0	0	446	385	180	180	83	84	0	0	709	649			
Federal									446	385			83	84			529	469	100	429	469
Water Users											100	400					100	400			
Non-Federal											180	180					180	180			
Other Agencies																					
Smith Fork Project	0	0	0 (0 0 0	0	0	0	0	370	375	143	143	80	71	0	0	593	589			
Federal									370	375			80	71			450	446	93	357	446
Water Users																					
Non-Federal Other Agencies											143	143					143	143			
	_				_		_				_	_			_	_					
Strawberry Valley Project	0	0	0 (0 0	0	0	0	0	234	234	0	0	696	371	0	0	200	605		001	
Federal Water Users									234	234			696	371			930	605	44	886	605
Tucumcari	0	0	0 4	0 0 0	0	0	0		21	18	0	0	E	5	0	0	26	23			
Federal	U	U	V	U U	U	U	"	U	21	18	U	U	5	5	U	U	26	23	10	16	23
Water Users									21	10			3	3			0	0	10	10	
		~				~		=							^		4.040				
Uncompangre Project	0	0	0	0 0	0	0		569	254	214	0	0	213	214	0	0	_,-,-	997	1 70	002	00=
Federal Water Users							575	569	254	214			213	214			1,042	997	150	892	997
Water Users																	0	U			
Vernal Unit, CUP	0	0	0 (0 0	0	0	0	0	129	131	20	20	1,718	1,651	0	0		1,802			
Federal Non-Federal									129	131	20	20	933 785	901 750			1,082 785	1,052 750	38	1,044	1,052
11011-1 cucial													103	730			703	130			

								Operating	g Expenses								Non-O _J	perating	Tot	al			
UC REGION	Irrig	ation	Pow	er	Flood C	Control	M&	:I	F&	\mathbf{W}	Water (Control	Recre	eation	LR	M	Expe	nses 1/	Obliga	tions	C/O		
Projects	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Weber Basin Project	0	0	0	0	0	0	0	0	0	0	1,579	1,511	90	92	453	457	0	0	2,122	2,060			
Federal											1,579	1,511	90	92	453	457			2,122	2,060	81	2,041	2,060
Water Users																							
Non-Federal																			0	0			
Other Agencies																							
Weber River Project	0	0	0	0	0	0	0	0	0	0	88	86	27	27	33	33	0	0	148	146			
Federal											88	86	27	27	33	33			148	146	11	137	146
Water Users																			0	0			
Total Obligations	501	483	5,110	3,755	2,818	2,985	1,471	1,436	18,674	20,125	39,846	38,180	1,392	1,686	7,984	7,417	416	403	78,212	76,470			
Total Federal	0	0	5,110	3,755	2,818	2,985	0	0	16,379	17,830	37,256	35,527	831	1,125	7,199	6,667	416	403	70,009	68,292	5,384	64,625	68,292
Total Water Users	501	483	0	0	0	0	1,471	1,436	1,425	1,425	76	76	6	6	785	750	0	0	4,264	4,176			
Total Non-Federal	0	0	0	0	0	0	0	0	0	0	0	0	555	555	0	0	0	0	555	555			
Total Other Agencies	0	0	0	0	0	0	0	0	870	870	2,514	2,577	0	0	0	0	0	0	3,384	3,447			
% of Appropriated Funds	0.0%	0.0%	7.5%	5.5%	4.1%	4.4%	0.0%	0.0%	24.0%	26.1%	54.6%	52.0%	1.2%	1.6%	10.5%	9.8%	0.6%	0.6%	108.3%	100.0%			
1/ Reflects O&M during Constr	uction, Safety	of Dams,	etc.																				

																	Non-Operating	Т	Total		Project	Total
GP REGION	Irriga	ation	Po	wer	Flood (Control	Me	&I	F8	W	Water (Control	Recre	eation	LI	RM	Expenses 1/	Obli	igations	C/O	Fede	ral
Projects	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017						
Arbuckle Project	0	0	0	0	72	71	97	72	37	27	77	77	0	0	1	1	0 0	284	248	0		
Federal					72	71	97	72	37	27	67	67			1	1		274	238		274	238
Non-Federal											10	10						10	10			
Canadian River	0	0	0	0	56	60	23	64	13	16	73	73	0	0	6	6	0 0	171	219	0		
Federal					56	60	23	64	13	16	73	73			6	6		171	219		171	219
Non-Federal					-													0	0		•	
Colo-Big Thompson	430	344	12,482	17,366	15	17	0	0	17	32	3,201	3,043	312	343	382	406	0 0	16,839	21,551	187		
Federal	430	344	11,259	14,178	15		U	U	17	32	1,632	1,552	222	243		390		13,937	1	187	13,750	16,756
Non-Federal	430	344	1,223	3,188	13	17			1/	32	1,569	1,491	90	100		16		2,902			13,730	10,730
Non-rederal			1,223	3,100							1,509	1,471	70	100	20	10		2,902	4,773			
Fry-Ark Project	1,102	1,285	14,173	4,547	517	603	921	1,074	1,127	1,326	3,486	3,350	516	191	433	419	0 0	22,275	12,795	5		
Federal	1,102	1,285	4,173	4,547	517	603	921	1,074	1,127	1,326	3,466	3,330	297	141	421	409		12,024	12,715	5	12,019	12,715
Non-Federal			10,000								20	20	219	50	12	10		10,251	80			
TT (1)			0		0		_			_	_		_		20	20						
Huntley	5	- 7	0	U	0	0	5		5	5	7		5	7	30	30	0 0	57				
Federal	5	7					5	7	5	5	7	7	5	7	30	30		57	63		57	63
Non-Federal																		1	U			
Kendrick Project	208	46	4,162	3,469	16	16	0	0	53	56	30	30	144	144	129	125	0 0	4,742	3,886	0		
Federal	188	26	4,162	3,469	16	16			53	56	20	20	86	86	129	125		4,654	3,798	0	4,654	3,798
Non-Federal	20	20									10	10	58	58				88	88			
T 1 111 D 1 4			0	0	0		0		0				0	0	1.070	1.014		1.050	1.014			
Leadville Project	0	0	0	U	0	0	0	0	0	0	0	0	0	U		1,914	0 0	1,958	<u> </u>		1 050	1 014
Federal Non-Federal															1,958	1,914		1,958	1,914		1,958	1,914
Non-reueral																		V	V			
Lower Yellowstone	0	0	0	0	0	0	0	0	364	364	0	0	0	0	16	16	0 0	380	380	1		
Federal									364	364					16	16		380		1	379	380
Non-Federal																		0	0			
																			1-			
Mid-Dakota Rural	0	0	0	0	0	0	0	0	15	15		0	0	0	1 0	0	0 0	15				
Federal									15	15								15	15		15	15
Non-Federal																		1 0	0			
									<u> </u>						<u> </u>							

																	Non-Op	erating	Τ	Cotal		Project	Total
GP REGION	Irriga	tion	Po	wer	Flood C	Control	M	& I	F8	W	Water (Control	Recre	eation	Li	RM	Exper	nses 1/	Obli	gations	C/O	Fede	eral
Projects	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017						
McGee Creek	0	0	0	0	118	113	485	489	65	64	35	35	77	201	196	166	0	0	976	1,068	0		
Federal					118	113	485	489	65	64	26	26	52	126	196	166			942	984		942	984
Non-Federal											9	9	25	75					34	84			
Milk River	960	1,002	0	0	189	173	0	0	313	313	365	285	618	496	225	225	0	0	2,670	2,494	0		
Federal	410	254			189	173			313	313	315	235	583	496	225	225			2,035	1,696		2,035	1,696
Non-Federal	550	748									50	50	35						635	798			
Mirage Flats	6	6	0	0	27	15	0	0	0	0	13	13	15	15	62	62	0	0	123	111	0		
Federal	6	6			27	15					13	13	15	15	62	62			123	111		123	111
Non-Federal																			0	0			
Mni Wiconi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,000	12,200	12,000	12,200	5		
Federal									-								12,000	12,200	12,000		5	11,995	12,200
Non-Federal																			0	0			
					•								***************************************		***************************************		•				***************************************		
Mountain Park	0	0	0	0	97	107	142	147	22	21	34	34	45	159	195	173	86	89	621	730	0		
Federal					97	107	142	147	22	21	25	25	45	124	195	173	86	89	612	686		612	686
Non-Federal											9	9		35					9	44			
Norman Project	0	0	0	0	60	76	36	36	35	35	17	17	103	126	130	109	0	0	381	399	0		
Federal					60	76	36	36	35	35	17	17		96	130	109			351	369		351	369
Non-Federal													30	30					30	30			
North Platte Project	417	405	905	869	20	20	2	2	43	58	252	252	66	51	144	143	0	0	1,849	1,800	0		
Federal	73	73	905	869	20	20	2	2	43	58	152	152		41	144	143			1,395	1,358		1,395	1,358
Non-Federal	344	332									100	100	10	10					454	442			
Nueces River	0	0	0	0	99	110	310	238	59	29	38	38	257	238	217	198	0	0	980	851	0		
Federal					99	110	310	238	44	29	38	38	219	203	202	198			912	816		912	816
Non-Federal									15	0			38	35					68	35			
									•					\					•				
Ainsworth Unit	20	18	0	0	14	4	0	0	0	6	54	54	62	62	69	69	0	0	219	213	0		
Federal	20	18			14	4				6	39	39		37		69			179	173		179	173
Non-Federal											15	15		25					40	40			
											-			_									

			1														Non-Operating	Т	otal		Project	Total
GP REGION	Irriga	tion	Po	wer	Flood	Control	M	&I	F&	:W	Water C	ontrol	Recre	ation	LF	RM	Expenses 1/	Obli	gations	C/O	Fede	eral
Projects	FY 2016 F	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 I	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Almena Unit	14	13	0	0	227	225	4	3	23	7	15	15	232	230	46	46	0	561	539	0		
Federal	14	13			227	225	4	3	23	7	15	15	207	205	46	46		536	514		536	514
Non-Federal													25	25				25	25			
Angostura Unit	7	6	0	0	0	0	0	0	0	0	140	140	940	910	132	132	0 0	1,219	1,188	0		
Federal	7	6									98	98	762	732	132	132		999	968		999	968
Non-Federal											42	42	178	178				220	220			
Armel Unit	86	110	0	0	291	359	0	0	0	0	5	5	0	0	0	11	0 0	382	485	0		
Federal	86	110			291	359					5	5	0		0	11		382	485		382	485
Non-Federal		110											0					0	0			
													-									
Belle Fourche Unit	373	367	0	0	0	330	0	0	0	0	621	291	368	379	138	152	0 (1,500	1,519	0		
Federal	333	327			0	330					521	191	284	295	138	152		1,276	1,295		1,276	1,295
Non-Federal	40	40									100	100	84	84				224	224			
Bostwick Unit	330	332	0	0	426	429	0	0	181	181	412	412	254	254	193	193	0 (1,796	1,801	0		
Federal	74	76			426	429			181	181	244	244	136	136	193	193		1,254	1,259		1,254	1,259
Non-Federal	256	256									168	168	118	118				542	542			
Boysen Unit	28	31	1,365	1,369	270	308	0	0	13	13	109	109	340	340	153	153	0 0	2,278	2,323	0		
Federal	11	13	1,365	1,369	270	308			13	13	69	69	178	178	153	153		2,059	2,103		2,059	2,103
Non-Federal	17	18									40	40	162	162				219	220			
Buffalo Bill Dam Mod.	19	26	2,479	2,532	33	45	0	0	12	14	0	0	50	57	132	129	0 0	2,725	2,803	0		
Federal Federal	19	26	2,479	2,532	33				12	14			26	33		129		2,701	2,779	0	2,701	2,779
Non-Federal			2,17	2,552		10			12	17			24	24		12)		24	<u> </u>	V	2,701	2,777
Canyon Ferry Unit	50	48	3,436	3,787	326	156	7	3	223	106	681	617	1,645	1,403	270	270	0 0	6,638	6,390	253		
Federal	50	24	3,341	3,114	326	156	7	3	223	106	652	612	1,645	1,403	270	270		6,514	5,688	253	6,261	5,688
Non-Federal		24	95	673							29	5						124	702			
Cedar Bluff Unit	148	148	0	0	312	306	4	4	0	5	10	10	64	64	69	69	0 0	607	606	0		
Federal Federal	148	148	V	J	312	306		4		5	10	10		39		69		582	581		582	581
Non-Federal	110	170			312	300				3	10	10	25	25				25			302	301
TION TOWNERS																						

																	Non-O _l	perating	7	Total		Project	Total
GP REGION	Irriga	tion	Po	wer	Flood (Control	M	[&I	F8	&W	Water	Control	Recre	eation	LI	RM	Expe	nses 1/	Obli	igations	C/O	Fede	eral
Projects	FY 2016 I	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Dickinson Unit	0	0	0	0	82	100	0	0	205	362	0	0	252	252	81	82	0	0	620	796	0		
Federal					67	85			205	362	0		252	252	81	82			605	781		605	781
Non-Federal					15	15													15	15			
East Bench Unit	324	318	0	0	75	72	0	0	45	45	186	186	272	272	151	151	0	0	1,053	1,044	0		
Federal	139	133			75	72			45	45	181	181	272	272	151	151			863	854		863	854
Non-Federal	185	185									5	5							190	190			
Frenchman-Camb Unit	267	234	0	0	874	752	0	0	158	152	222	222	855	783	254	254	0	0	2,630	2,397	0		
Federal	267	234			874	752			158	152	152	152	695	623	254	254			2,400	2,167		2,400	2,167
Non-Federal											70	70	160	160					230	230			
Garrison Diversion Unit	0	0	0	0	427	417	6,000	6,410	0	0	10	10	97	97	209	188	16,406	16,406	23,149	23,528	136		
Federal Federal					427	417	6,000	6,410			10	10	97	97	***************************************	188	16,406	16,406		1	136	23,013	23,528
Non-Federal								9,120									20,100	0	0	0		20,010	20,020
Glen Elder Unit	49	54	0	0	932	1,005	9	9	24	26	15	14	102	102	138	138	0	0	1,269	1,348	0		
Federal	49	54			932	1,005			24	26	15	14	57	57	138	138	0	0	1,224			1,224	1,303
Non-Federal													45	45					45				
Heart Butte Unit	30	39	0	0	396	67	0	0	238	313	16	16	452	452	218	214	0	0	1,350	1,101	0		
Federal Federal	30	39	U	<u> </u>	396	67		<u> </u>	238	313	16			380		214	U	U	1,278			1,278	1,029
Non-Federal	30				370				250		10		72	72	***************************************	217			72			1,270	1,027
TTalana Wallan TIni4	157	10		0		11	10	17		101	12	12	12	12	0	12	•		200	105			
Helena Valley Unit	156	19	0	U	0	11	19			101	13						0	U	200			100	174
Federal Non-Federal	151 5	14 5				11	19	17		101	13	13	6	6		12			189 11			189	174
	_		_				_	_	_	_	_						_				_		
Kansas River Area	5	5	0	0	53	53	0	0	0	0	0	0	42	42	0	0	0	0	100		-	400	100
Federal	5	5			53	53							42	42					100	100		100	100
Non-Federal																			0	U	-		
Keyhole Unit	43	42	0	0		166		1		100		<u> </u>			***************************************		0	0	965				
Federal	43	42			171	166	1	1	103	100	12	12		311	126	143			767			767	775
Non-Federal													198	198					198	198			
Kirwin Unit	31	39	0	0	201	237	0	0	4	5	52	52	101	122			0	0	464	529	0		
Federal	31	39			201	237			4	5	32	32	101	122	75	74			444	509		444	509
Non-Federal											20	20							20	20		***************************************	

																	Non-Op	perating	Т	otal		Project	t Total
GP REGION	Irrigat	ion	Po	wer	Flood C	Control	M	&I	F	&W	Water	Control	Recr	eation	L	RM	Expe	nses 1/	Obli	gations	C/O	Fede	eral
Projects	FY 2016 F	Y 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Lower Marias Unit	58	59	0	0	758	763	19	19	88	88	131	148	380	380	301	301	0	0	1,735	1,758	0		
Federal	58	59			758	763	19	19	88	88	131	148	360	360	301	301			1,715	1,738		1,715	1,738
Non-Federal													20	20					20	20			
Missouri Basin Unit	0	0	24	24	36	39	0	0	0	0	210	214	0	0	0	0	1,027	1,024	1,297	1,301	0		
Federal			24	24	36	39					210	214					1,027	1,024	1,297	1,301		1,297	1,301
Non-Federal									•		•••								0	0	•		
Narrows Unit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	41	0	0	41	41	0		
Federal															36	36			36	36		36	36
Non-Federal															5	5			5	5			
North Loup Unit	24	22	0	0	23	4	0	0	6	6	68	68	74	74	81	81	0	0	276	255	0		
Federal	24	22			23	4			6	6	53		44			81			231	210		231	210
Non-Federal											15		***************************************						45	45			
North Platte Area	25	20	6,864	4,645	90	79	0	0	51	50	97	96	189	189	187	187	0	0	7,503	5,266	0		
Federal	10	8	4,524	4,645	90	79			51							187			5,123	5,229		5,123	5,229
Non-Federal	15	12	2,340	1,010							25		109	200		10.			2,380	37			
Oak a Unit	26	26	0	0	0	0	0	0	0	0	0	0		0	5 0	71	0		94	107			
Oahe Unit Federal	36	36	U	U	0	<u> </u>	U	U	0	U	U	U	0	U	58 58	71 71		U	94			94	107
Non-Federal	30	30													30	/1			0	0		74	107
Tion-reactar																					-		
Owl Creek Unit	24	33	0	0	13	13	0	0	0	0	6	6	29	29	30	30	0	0	102	111	0		
Federal	24	33			13	13					6	6	29			<u> </u>			102			102	111
Non-Federal																			0	0			
Rapid Valley - Pactola	0	0	0	0	54	53	110	110	14	13	16	18	0	0	1	1	0	0	195	195	0		
Federal					54	53									1	1			195			195	195
Non-Federal																			0	0			
Riverton Unit	7	7	182	100	41	41	0	0	18	18	16	8	166	166	237	234	0	Λ	667	574	0		
Federal	7	7	182	100	41	41	1	U	18	\			166	<u> </u>		234	U	U	663	574		663	574
Non-Federal	1		102	100	71	71			10	10	12	0	100	100	231	234			1	0		003	3/4
110H-1 CUCI AI																			 				

																	Non-Operating	Γ	Total		Project	t Total
GP REGION	Irrigat	ion	Po	wer	Flood (Control	M	&I	F8	W	Water	Control	Recr	eation	LI	RM	Expenses 1/	Obli	igations	C/O	Fede	eral
Projects	FY 2016 F	Y 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016 FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Shadehill Unit	0	0	0	0	275	262	0	0	15	15	6	6	217	217	106	106	0 0	619	606	0		
Federal					275	262			15	15	6	6	142	142	106	106		544	531		544	531
Non-Federal													75	75				75	75			
Webster Unit	48	13	0	0	1,013	276	0	0	0	3	12	12	518	152	50	49	0 0	1,641	505	0		
Federal	48	13			1,013	276				3	12	12	518	152	50	49		1,641	505		1,641	505
Non-Federal																		0	0			
Yellowtail Unit	0	0	17,130	5,001	1,266	1,221	58	56	162	157	597	545	0	0	49	49	0 0	19,262	7,029	63		
Federal			4,957	4,774	1,266	1,221	58	56	162	157	597	545			49	49		7,089	6,802	63	7,026	6,802
Non-Federal			12,173	227														12,173	227			
Rapid Valley - Deerfield	13	13	0	0	9	9	13	13	14	14	32	32	13	13	1	1	0 0	95	95	0		
Federal	13	13			9	9	13	13	14	14	6	6	13	13	1	1		69	69		69	69
Non-Federal		***************************************									26	26						26	26			
San Angelo	47	54	0	0	191	205	46	53	41	46	58	58	64	65	163	174	0 0	610	655	0		
Federal	47	54			191	205	46	53	41	46	38	38	64	65	163	174		590	635		590	635
Non-Federal											20	20						20	20			
Shoshone	61	67	455	473	10	10		0	7	7	112	120		57		177	0 0	879	<u> </u>	0		
Federal	23	29	455	473	10	10			7	7	72	76		57	177	177		801	+		801	829
Non-Federal	38	38									40	44						78	82			
Sun River	57	61	0	0	104	104	0	0	22	22	131	131	57	60	35	35	0 0	406	413	0		
Federal	57	61	V	U	104	104		V	22	22		131		60		35		406		U	406	413
Non-Federal	31	VI			104	104			22		131	131	31	00	33			1 0	0		700	413
11011 I cuciui																						
WC Austin	113	103	0	0	174	156	0	0	16	16	84	84	25	25	301	239	0 0	713	623	0		
Federal	113	103			174	156			16	16	59	59	25	25	301	239		688	598		688	598
Non-Federal											25	25						25	25			
Washita	0	0	0	0	463	473	157	151	41	40	172	134	215	304	348	302	0 0	1,396	1,404	0		
Federal					463	473	157	151	41	40	99	80	145	204	338	302		1,243	1,250		1,243	1,250
Non-Federal											73	54	70	100	10			153	154			
						-																

					,								,				Non-O	perating	7	Total		Project 7	Total
GP REGION	Irriga	ation	Po	wer	Flood (Control	M	&I	F&	z W	Water (Control	Recre	eation	LR	M	Expe	enses 1/	Obli	igations	C/O	Feder	ral
Projects	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2017	FY 2016	FY 2016	FY 2017
Wichita-Cheney	0	0	0	0	81	88	18	17	82	33	84	93	142	217	195	163	0	0	602	611	0		
Federal					81	88	18	17	52	33	64	63	104	167	195	163			514	531		514	531
Non-Federal									30		20	30	38	50					88	80			
Total Obligations	5,621	5,432	63,657	44,182	10,997	10,219	8,486	8,995	3,974	4,325	12,033	11,205	10,953	10,261	8,939	8,714	29,519	29,719	154,179	133,052	650		
Total Federal	4,151	3,754	37,826	40,094	10,982	10,204	8,486	8,995	3,929	4,325	9,519	8,802	9,093	8,471	8,877	8,683	29,519	29,719	122,382	123,047	650	121,732	123,047
Total Non-Federal	1,470	1,678	25,831	4,088	15	15	0	0	45	0	2,514	2,403	1,860	1,790	62	31	0	0	31,797	10,005	0		
% of Appropriated Funds	3.4%	3.1%	30.7%	32.6%	8.9%	8.3%	6.9%	7.3%	3.2%	3.5%	7.7%	7.2%	7.4%	6.9%	7.2%	7.1%	24.0%	24.2%	100.5%	100.0%			
1/ Reflects O&M during C	onstruction	, Safety o	of Dams, et	tc.																			
	5,621	5,432	63,657	44,182	10,997	10,219	8,486	8,995	3,974	4,325	12,033	11,205	10,953	10,261	8,939	8,714	29,519	29,719	154,179	133,052	0	121,732	123,047
2/4/2016																							

PROJECT REPAYMENT FY 2017

(\$ In Thousands)

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`				Ad		Non-	Leavitt Act		Non-	
Project	Irrigators	Power	M&I	Valorem	Other	Federal	Deferred	Deferred	Reimb	Total
Animas-La Plata 1/	0	22,703	44,895	0	0	3,000	0	0	477,534	548,132
Central Arizona Project 2/	32,493	624,381	1,170,472	0	240,907	435,534	996,050	0	1,543,440	5,043,277
Central Valley Project:										
Auburn-Folsom South 3/	2,334,284	575,043	221,284	0	0	8,374	0	2,425	840,658	3,982,068
American River Division Folsom Dam 4/	18,719	4,612	1,775	0	0	0	0	0	151,768	176,874
Delta Division 5/	143,116	35,256	13,567	0	0	4,447	0	0	23,560	219,946
Miscellaneous Project Programs 6/	335,806	82,724	31,833	0	0	116,293	0	0	587,074	1,153,730
Sacramento River Division 7/	203,729	50,188	19,313	0	0	76,830	0	54,450	252,164	656,674
San Felipe Division 8/	74,817	0	269,493	0	0	47,414	0	0	-8,549	383,175
San Joaquin Division 9/	0	0	20	0	0	63,519	0	0	230,347	293,886
Shasta Division 10/	120,582	29,705	11,431	0	0	44,301	0	0	127,660	333,679
Trinity River Division 11/	172,264	42,436	16,330	0	0	4,863	0	0	225,009	460,902
West San Joaquin Division San Luis Unit 12/	1,579,371	0	149,720	0	0	250,655	0	0	530,242	2,509,988
Colorado River Basin Salinity Control Project, Title I Division 13/	0	0	0	0	0	0	0	0	453,790	453,790
Colorado River Basin Salinity Control Project, Title II Division: Basinwide Program 14/	0	0	0	0	75,000	0	0	0	175,000	250,000
Fort Peck Reservation/Dry Prairie Rural Water system 15/	0	0	0	0	0	28,242	0	0	301,515	329,757
Lewis & Clark RWS 16/	0	0	0	0	0	106,079	0	0	430,129	536,208
Mni Wiconi Project 17/	0	0	0	0	0	17,456	0	0	487,813	505,269
Pick-Sloan Missouri Basin Garrison Diversion Unit 18/	82,170	39	0	0	0	386,015	29,434	291,821	1,261,124	2,050,603
North Central Montana Rural Water Project 19/	0	0	0	0	0	44,897	0	0	331,985	376,882
Southern Arizona Water Rights Settlement Act 20/	0	0	0	0	0	3,382	0	0	0	3,382
Navajo Gallup Water Supply Project 21/	0	0	63,464	0	0	50,000	0	0	881,393	994,857

"Total" column cost represents the \$500,000,000 January 2003 Construction Cost Estimate indexed to the October 2011 price level.

Non-Federal Share: Includes \$3,000,000 from the State of Colorado.

Non-reimbursable: Includes \$23,405,263 for cultural resources; \$62,294,467 for fish and wildlife enhancement and mitigation; \$366,934,590 for Indian water rights settlements; and \$24,899,309 for non-Indian M&I allocated costs above the reimbursable cap pursuant to Section 207 of P.L. 108-447 as amended by Section 5005 of P.L. 109-148.

Reimbursable: Funding and repayment received for Municipal and Industrial (M&I) costs are \$8,191,496 from the Colorado Water Resources and Power Development Authority, \$7,389,645 from the San Juan Water Commission, and \$3,810,858 from the La Plata Conservancy District, and \$25,503,436 from the State of Colorado. Reimbursable irrigation investigation costs to be repaid by power by 2057 are \$22,703,000.

Irrigators, Power, Municipal and Industrial Water, Ad Valorem (\$1,827,345,781): This total includes \$1,652,971,000 repayment obligation of the Central Arizona Water Conservation District, a projected \$7,182,781 repayment of Tucson Reliability, net interim revenues of \$146,692,000 from the sale of energy and water from 1974 through 1993, and prepayment for repayment delay of \$20,500,000 made in 1992. Per the Stipulated Settlement Agreement \$28,434,000 becomes non-reimbursable.

Other (\$240,907,000): Amounts consist of reimbursable costs to be repaid by entities other than the Central Arizona Water Conservation District and Navajo Layoff Contracts: Non-Indian Distribution Systems, \$240,907,000 which includes the Harquahala Valley and Hohokam Irrigation and Drainage Districts. Harquahala's repayment debt was extinguished by relinquishing their water rights in December 1992. Hohokam's was reassigned to the central Arizona cities to satisfy their Cliff Dam replacement water in December 1993.

Non-Federal Share (\$435,534,012): Consists of State and other governmental entities contributions. The amount of allocated costs which have been contributed by non-Federal entities is Arizona, \$985,000; New Mexico, \$300,000; the Non-Indian Distribution Systems entities, \$58,806,130; Salt River Project for Roosevelt Dam Powerplant, \$638,478; City of Tucson for Tucson Pipeline, \$83,579; Central Arizona Water Conservation District for delay of the New River Siphon, \$98,645 and \$45,587,904 for repair of siphon and other deficiencies; Maricopa County for Castle Hot Springs Road, \$861,838; Maricopa County for recreation, \$12,540,911; in-kind services contributed for recreation associated with the Central Arizona Project aqueduct and Tucson Terminal Storage Reservoir, \$13,473,000; Plan 6 entities \$229,845,000 (contributed by Central Arizona Water Conservation District, \$175,000,000; Arizona cities, \$43,121,000; Maricopa County Flood Control District \$9,985,248, Arizona central cities will pay \$1,738,752 under the Plan 6 Upfront Funding agreement for the increased hydrogeneration resulting from the additional storage space in T. Roosevelt Reservoir; interest during construction credit for interest bearing functions of the Plan 6 Up Front Funding Agreement contributions, \$33,390,000, and reimbursable recreation, \$38,923,527.

Leavitt Act (\$996,050,000): The amount of costs allocated to Indian irrigation which is eligible for deferral under the Leavitt Act. The Leavitt Act permits repayment to be deferred as long as the land is in Indian ownership and repayment is within the land's repayment capability.

Deferred (\$0): The Middle Gila and Drainage divisions, although authorized, will not be constructed and the costs have been removed.

Non-reimbursable (\$1,543,440,020): Costs include Colorado River Division, \$900,277; Indian Distribution Division, \$916,835,020; recreation, \$129,246,792; flood control, \$124,499,609; Pima County flood and erosion control, \$3,500,000; cultural resources, \$45,122,882 contributed investigation costs, \$963,000, and siphon repair costs, \$50,911,629; and environmental enhancement costs, \$288,000. Also includes \$161,705,949 for construction of the Upper Gila Division which is non-reimbursable under provisions of Public Law 108-451. In addition, \$109,466,862 is determined to be non-reimbursable as a result of the Stipulated Settlement negotiated by the Department of Justice. Historically, based on Reclamation's cost allocation methodology, these costs exceeded the repayment ceiling and were considered reimbursable. That was challenged by the Central Arizona Water Conservation District. The Department of Justice negotiated a Stipulated Settlement of the very complex repayment litigation between the United States and the Central Arizona Water Conservation District regarding operations and repayment of the Central Arizona Project. The judge issued an Order on May 9, 2000 staying litigation for three years to allow all conditions of the Stipulated Settlement to be met. On April 9, 2003, the Central Arizona Water Conservation District and the United States agreed to extend the date to complete these conditions. A revised Stipulation was approved by the court on April 24, 2003, which extended the date for meeting the conditions and requirements to May 9, 2012. Many issues were at stake beyond the repayment amount. The Federal Government received non-monetary assets and benefits which, when added to the risk of continued litigation, are considered adequate compensation in exchange for these unrecoverable costs. These non-monetary assets and benefits include, but are not limited to, an increased allocation of Federal water of approximately 200,000 acre-feet which would be available to the Secretary to settle future Indian water right claims, agreement with Central Arizona Water Conservation District on the uses of project revenues and many operational issues including water delivery pricing to tribal water users, clarification of deficiency and completion items, establishment of a fixed interest bearing portion of repayment, and a means to terminate the lengthy and costly litigation. Reclamation considers classifying these costs "non-reimbursable" as the most accurate way to describe them. They have not been determined as non-reimbursable through the usual application of Reclamation law, but rather as a result of the Stipulated Settlement, which limits the repayment ceiling to \$1,650,000,000. Under the Stipulated Settlement, such costs may not be reimbursed to the United States Treasury unless future project revenues are sufficient, after meeting numerous other project purposes, to be returned to the Treasury. Therefore the amount of project costs that are reimbursable and non-reimbursable will depend on whether the Settlement conditions are met.

Non-Federal Share: Includes \$8,374,000 for State of California, Department of Parks and Recreation (50 percent of current estimate of cost of planned Auburn Lake recreation facilities).

Deferred Use (\$2,425,000): Actual cost of providing additional capacity in the completed portion of the Folsom South Canal (Reaches 1 and 2) to serve the planned Eastside Division service area as authorized under Section 1, P.L. 89-161.

Non-reimbursable (\$840,658,000): Includes recreation, \$10,684,000; fish and wildlife, \$591,385,000; flood control, \$155,524,000; and navigation, \$11,170,000, American River Pump Station \$71,895,000.

- Non-reimbursable (\$151,768,000): Includes \$1,247,000 for flood control, \$90,000 for navigation, \$7,248,000 for safety, security and law enforcement and \$143,183,000 for safety of dams program activities completed for Folsom Dam under the Reclamation Safety of Dams Act of 1978, November 2, 1978 (P.L. 95-578), as amended in 1984 by P.L. 98-404.
- 5/ **Non-Federal Share (\$4,447,000):** Includes \$4,447,000 for State of California share of costs of fish and wildlife activities authorized under the Central Valley Project Improvement Act (P.L. 102-575).

Non-reimbursable (\$23,560,000): Includes \$13,340,000 for fish and wildlife, \$9,535,000 for flood control, and \$685,000 for navigation.

6/ **Non-Federal Share** (\$116,293,000): Includes \$28,000 for Kern County share of costs of recreation facilities at Lake Woollomes; and \$116,265,000 for State of California share of costs of fish and wildlife activities authorized under the Central Valley Project Improvement Act (P.L. 102-575).

Non-reimbursable (\$587,074,000): Includes \$563,066,000 for fish and wildlife; \$28,000 for recreation; \$22,373,000 for flood control; and \$1,607,000 for navigation.

Power Users (\$50,188,000): Current estimate of the total power revenue assistance requirement for 20 irrigation water service contractors located in the Black Butte Dam and Reservoir (Stony Creek), Corning Canal, and Tehama-Colusa Canal service areas. This estimate is based on the results of the Payment Capacity Analysis for Tehama-Colusa Water Users Association completed in October 1994. This ability to pay study will be updated every 5 years in accordance with Section 105 of the Act of October 27, 1986 (P.L. 99-546).

Non-Federal Share (\$76,830,000): Represents State of California share of costs of fish and wildlife activities authorized under the Central Valley Project Improvement Act (P.L. 102-575), as follows: \$13,264,000 for fish screens and fish recovery facilities associated with the Hamilton City Pumping Plant (Glenn-Colusa Irrigation District), and \$63,566,000 for fish passage facilities at Red Bluff Diversion Dam.

Deferred Use (\$54,450,000): Incremental cost of providing extra capacity and elevation in Tehama-Colusa Canal (Reaches 5-8A) to enable future water service to the planned West Sacramento Canal Unit service area, as authorized under Section 1 of the Act of August 19, 1967 (P.L. 90-65).

Non-reimbursable (\$252,164,000): Includes \$282,000 for recreation, \$237,319,000 for fish and wildlife, \$13,574,000 for flood control, \$975,000,000 for navigation, and \$14,000 for preservation of historical and archaeological data under the Act of June 27, 1960 (P.L. 86-23).

Non-Federal Share (Local Interests \$47,414,000): Includes \$47,413,521 for non-Federal share of costs of recreation facilities to be repaid by the County of San Benito under Section 3 of P.L. 90-72.

Non-reimbursable (-\$8,548,521): Includes -\$30,088,521 for recreation, \$17,089,000 for fish and wildlife, \$4,099,000 for interest during construction, \$105,000 for archeological, cultural and historical resources, and \$247,000 for safety, security, and law enforcement.

9/ **Non-Federal Share (\$63,519,000):** Includes \$63,519,000 for fish and wildlife.

Non-reimbursable (\$230,347,000): Includes \$230,347,000 for fish and wildlife.

Non-Federal Share (\$44,301,000): Represents State of California share of costs of fish and wildlife activities authorized under the Central Valley Project Improvement Act (P.L. 102-575), as follows: \$22,087,000 for Shasta Temperature Control Device, \$4,299,000 for Anderson-Cottonwood Irrigation District, \$17,467,000 for Clear Creek Restoration, and \$448,000 for spawning gravel.

Non-reimbursable (\$127,660,000): Includes \$110,856,000 for fish and wildlife, \$8,034,000 for flood control, \$577,000 for navigation, and \$8,193,000

for Safety, Security, and Law Enforcement.

Non-Federal Share (\$4,863,000): The State of California and the counties of Humboldt and Trinity in California will pay to the Treasury of the United States an amount equal to 15 percent of the total amount of money that is expended for carrying out Grass Valley Creek activities, under Section 4(b) of the Act of October 24, 1984 (P.L. 98-541).

Non-reimbursable (\$225,009,000): Includes \$611,000 for recreation, \$212,097,000 for fish and wildlife, \$11,477,000 for flood control, and \$824,000 for navigation.

Non-Federal Share (\$250,655,000): Includes \$3,943,000 for the State of California, Department of Parks and Recreation, share of the costs of recreation facilities at B.F. Sisk (San Luis) Reservoir, Los Banos Reservoir, San Luis Canal, and O'Neill Forebay; \$246,712,000 for the State of California, Department of Water Resources, share of the Joint State-Federal water facilities, under Section 10(b) of Federal-State Contract No. 14-06-200-9755, December 31, 1961, and Sections 9(d) and 30 of Contract No. 14-06-200-9755 Supplement No. 1.

Non-reimbursable (\$530,242,000): Includes \$7,169,000 for recreation; \$396,187,000 for fish and wildlife; \$105,227,000 for flood control; \$7,557,000 for navigation; \$4,612,000 for non-reimbursable portion of Safety of Dams costs at CVP, San Luis Unit; \$7,000 for preservation of historical and archaeological data under P.L. 86-523; \$6,800,000 for Kesterson clean-up; and \$1,383,000 for incremental costs of improving existing roads to higher standards required for project construction (P.L. 87-874); and \$1,300,000 for Safety, Security, and Law Enforcement.

- Non-reimbursable (\$453,790,000): Includes \$407,688,000 Mexican Treaty Measures, \$164,000 for non-reimbursable preauthorization investigation costs, and \$45,938,000 for non-reimbursable irrigation costs. A repayment contract with Coachella Valley Water District for \$45,938,000 was executed March 14, 1978 and validated June 30, 1978. The contract provided that for each year the United States receives the benefits of the water saved by the lining program because mainstream Colorado River water is delivered to California in the quantities requested under Section 5 of the Boulder Canyon Project Act, construction costs of \$1,148,000 (\$45.938 million divided by a 40-year life of the canal) will be considered non-reimbursable. In October 2003, the contract was amended to add provisions of Title II of the San Luis Rey Indian Water Rights Settlement Act. These provisions made the repayment non-reimbursable during the planning, design and construction of works associated with the settlement act and during the period that the Indian Water Authority and the local entities (as defined in Section 102 of the settlement act) receive up to 16,000 acre-feet of water conserved by the works. As a result of these provisions, all of the repayment by Coachella Valley Water District is expected to be non-reimbursable.
- Non-reimbursable (\$175,000,000): P.L. 93-320, Section 205, states that 70 percent of the costs will be non-reimbursable. The remaining 30 percent is the reimbursable portion (Other \$75,000,000) advanced from the Lower Colorado River Basin Development Fund and the Upper Colorado River Basin Fund per P.L., 104-127. The reimbursable portion is divided between the Lower Colorado River Basin Development Fund and the Upper Colorado River Basin Fund provided that costs allocated to the Upper Basin shall not exceed 15 percent of the costs allocated to the Upper and Lower Basin Funds. P.L. 104-127 authorizes the option of cost-sharing in lieu of repayment for the salinity program. Cost-sharing funds are contributed by a surcharge to CRSP power users and collected in the Basin Funds.
- 15/ Non-Federal Share (\$28,351,000): 24 percent is the non-Federal cost-share that is provided between State and local funds.

Non-reimbursable (\$302,501,000): 100 percent of the project is non-reimbursable. Fort Peck Assiniboine and Sioux Tribes Water system (71 percent) and Dry Prairie Rural Water Authority Water System (29 percent).

Non-Federal Share (\$106,057,000): 50 percent of the non-Federal cost share would come from the three states of South Dakota, Minnesota, and Iowa. The other 50 percent would come from the Lewis & Clark RWS (20 member entities).

Non-reimbursable (\$417,962,000): The legislation P.L. 106-246 authorizes \$213,887,700 of Federal grant funds which has been indexed to \$417,962,000 and is 80 percent of the project costs for 19 of the 20 members and 50 percent of the incremental cost for the city of Sioux Falls.

Non-Federal Share (\$17,456,000): The amount of non-Federal cost-share will be covered by cooperative agreements with non-Indian beneficiaries prior to expenditure of Federal funds. Federal contribution to the West River/Lyman-Jones Rural Water System may not exceed 80 percent of the total cost of these systems.

Non-reimbursable (\$487,813,000): All of the cost of the Oglala Sioux Rural Water Supply System, Rosebud Sioux Rural Water System, Lower Brule Sioux Water System, and 80 percent of the cost of the West River/Lyman-Jones Water Supply Systems are non-reimbursable under provision of P.L. 100-516, as amended by P.L. 103-434, and P.L. 107-367.

Reimbursable (\$403,465,000): The reimbursable costs are \$82,170,000 for non-Indian irrigation; \$29,434,000 for Indian irrigation, which is deferred indefinitely under the Leavitt Act; \$39,000 for power, and \$291,821,000 for unused principal supply works capacity, which is deferred indefinitely under the Dakota Water Resources Act of 2000.

Non-Federal Share (\$396,838,000): The non-federal share costs are \$159,000,000 for non-Indian irrigation; \$76,000,000 for Indian irrigation on Fort Berthold; \$147,080,000 for the State of North Dakota Municipal, Rural, and Industrial Grant Program; \$13,350,000 for recreation; \$208,000 for a State of North Dakota contribution for headquarters building; and \$1,200,000 for the Natural Resources Trust.

Non-reimbursable (\$1,250,301,000): The non-reimbursable share costs are \$16,137,000 for non-Indian irrigation; \$6,978,000 for Indian irrigation; \$490,685,000 for the State of North Dakota Municipal, Rural, and Industrial Grant Program; \$357,341,000 for Indian Municipal, Rural, and Industrial Program; \$15,029,000 for recreation; \$22,195,000 for fish and wildlife enhancement; \$37,064,000 for unused capacity in Jamestown Dam and Reservoir; \$4,942,000 for highway improvements; \$39,403,000 for the Natural Resources Trust; and \$260,735,000 for de-authorized features and OM&R on unused, completed features (includes \$208,000 credit for land donation).

Non-Federal Share (\$44,613,000): 24 percent is the non-Federal cost-share that is the responsibility of the Authority.

Non-reimbursable (\$330,226,000): 100 percent of the project is non-reimbursable. Tribal portion of the Core System and Authority Portion of the Core System (76 percent) and Non-Core Delivery System (24 percent).

20/ Non-Federal Share (\$3,382,000): Includes \$3,382,000 from the Pima County Flood Control District.

Non-reimbursable (\$0): Repayment is non-reimbursable under Section 309(g) (7) and Section 314 of the Southern Arizona Water Rights Settlement Act as amended in Title III of the Arizona Water Settlement Act.

21/ "Total" column cost is based upon October 2011 price level (FY2012).

Non-Federal Share: Includes \$50,000,000 cost share from the State of New Mexico.

Non-Reimbursable: Includes \$35,766,202 for cultural resources; \$6,202,202 for mitigation; \$721,562,655 allocated to Navajo Nation water rights settlement; \$98,774,835 allocated to the City of Gallup, NM above their 35% repayment maximum; and 19,087,500 allocated to the Jicarilla Apache Nation above their 35% repayment maximum.

Reimbursable: Includes \$53,186,452 allocated to City of Gallup, NM at their 35% repayment maximum and \$10,277,885 allocated to the Jicarilla Apache Nation at their 35% repayment maximum.

RECLAMATION CONSTRUCTION PROGRAM

Energy and Water Development (in thousands of dollars)

Bureau/State/Project	Estimated Cost	Through 2016	2017 Request
Bureau of Reclamation 1/			
Arizona			
Central Arizona Project			
Eagle Creek fish barrier	1,148	62	1,086
O'Donnell Canyon fish barrier	692	392	300
Redfield Canyon fish barrier	2,800	513	2,200
Colorado River Front Work and Levee System			
River mile 151.5 bankline stabilization	338	38	300
River mile 166 bankline stabilization	539	38	501
San Carlos Apache Tribe Water Settlement Act	45,129	0	1,500
Arizona/California			
Colorado River wash fan control structures	4,604	1,732	780
Colorado River Front Work and Levee System			
Cibola Old River Channel	1,318	893	425
California			
Colorado River Front Work and Levee System			
River mile 33 design and reconstruction	1,870	351	59
New Mexico			
Navajo-Gallup Water Supply Project	1,131,021	475,507	87,000
Pojoaque Basin Regional Water System			
Aamodt litigation settlement	226,985	84,089	6,379
Washington			
Yakima River Basin Enhancement Project			
Cle Elum fish passage	107,000	9,180	6,299
Safety of Dams			
California			
Folsom Dam	336,000	313,410	9,400
Stampede Dam	36,000	32,000	2,300
Montana			
Nelson Dikes	7,500	6,700	800
Total, Bureau of Reclamation		-	119,329

^{1/} Excludes major Extraordinary Maintenance (XM or RAX) activities, as those are considered major repairs to existing assets and not "new construction."

FY 2017 RPAYMENT OF IRRIGATION INVESTMENT

	Repayment of Irrigation Investment By					Annual Charges Per Acre							
Project	Total Irrigation Investment Per Acre	Irrigators	Power Revenue	Cost Share Agriculture	UCRBF Revenue	Ad Valorem Tax	CRDF & Construction Funds	Indian Irrigation and Other Deferred	Non-Fed Contribution	Settlement Land Sales	Annual Charge	Investment Costs	Operations
Central Arizona													
Project	3380.77	77.49	929.03					2374.25			59.00	0	59.00
Central Valley Project 1/ American River Division Auburn-Folsom South Folsom Dam Gate Repairs Delta Division Miscellaneous Projects Sacramento Division San Felipe Division San Joaquin Division West San Joaquin Division- San Luis Unit Shasta Division Trinity River													
Colorado River Storage Project					<u>2</u> /								
Colorado River Basin Salinity Control Project - Title I	585.00							585 <u>3</u> /			N/A	N/A	N/A
Pick-Sloan Missouri Basin Project Garrison 4/	6220.00								2.00		32.01	N/A	55.22
Southern Arizona Water Rights Settlement Act Prj	5216.11							5216.11			N/A	N/A	N/A

FY 2017 RPAYMENT OF IRRIGATION INVESTMENT

1/ Summary of Irrigation CVP Investment

a. Water Service Contracts: Irrigation investment is to be repaid from water and power revenues collected at the project level in compliance with the operationally and financially integrated project provision included in the project authorization. Each division and unit is part of the total project; some divisions develop water supplies and other divisions and units deliver those water supplies. Irrigation investment data for the total authorized Central Valley Project are shown below:

<u>Rate</u>	<u>Amount</u>	Acres
\$1,196	\$1,196,435,522	<u>A</u> /
-297	-297,033,126	<u>A</u> /
-232	-232,677,052	$\overline{\mathbf{A}}$
<u>-54</u>	-53,591,834	<u>A</u> /
\$613	\$613,133,510	_
\$12.26 to \$217.62		<u>B</u> /
\$20.55		<u>C</u> /
\$31.65		
\$00.43		<u>C</u> / <u>C</u> /
	\$1,196 -297 -232 -54 \$613 \$12.26 to \$217.62 \$20.55 \$31.65	\$1,196 \$1,196,435,522 -297 -297,033,126 -232 -232,677,052 -54 -53,591,834 \$613 \$613,133,510 \$12.26 to \$217.62 \$20.55 \$31.65

- A/ Based on 1 million acres in the project service area that were irrigated with water supplied by the Central Valley Project in 1993, as reported in Reclamation's 1993 Crop Production Report, the irrigation plant investment repayment and capital relief are included in the draft 2016 Water Rates for the period through September 2014. Acres included in past reporting were based on irrigable acres and have been updated to reflect irrigated acres.
 - (a) Friant-Kern Canal and Madera Canal contractors repaid a substantial amount of integrated project capital under section 9(d) of the 1939 Act. The costs and the value of repayment is included above and excluded in the repayment contract amounts identified in footnote 1b.
- <u>B</u>/ Based on the draft 2016 Irrigation Water Rates, schedule A-1 (www.usbr.gov/mp/cvpwaterrates/).
- C/ Irrigation water rates are expressed in terms of average dollars per acre-foot for all CVP irrigation water contractors based on the costs and deliveries used to estimate the draft 2016 Irrigation Water Rates. Cost of Service rates for all individual contractors are adjusted annually to reflect changes in project costs and available water supplies.
- **b. Repayment Contracts:** Repayment contracts are generally for individual water users distribution systems. The estimate for repayment contracts capital balances to be repaid for irrigation water is provided in total for all repayment contracts balances remaining as of the federal fiscal year 2015 and is approximately \$149,281,957 (includes San Felipe Unit). Estimate to repay toward irrigation water use in 2016 is \$5 million.

FY 2017 RPAYMENT OF IRRIGATION INVESTMENT

2/ The irrigation investment for Colorado River Storage Project (CRSP) Participating Projects is to be repaid from irrigators, miscellaneous contributions, and power revenues from the Upper Colorado River Basin Fund (UCRBF). A summary of irrigation repayment estimates for the CRSP Participating Projects is shown below:

Repayment by Irrigators	\$ 68,200,000
Non-Reimbursable	8,964,000
CRDF & Contributions	55,826,000
Indian Irrigation Deferral	5,670,000
<u>UCRBF Revenue A/</u>	770,298,000
Total	\$ 908,958,000

- Amount shows the sum of the UCRBF revenues under the existing repayment schedules, within the 50-year repayment period of any irrigation repayment block, and based on the FY 2011 power repayment study. The Inspector General's Audit No. BOR 98-I-250, "Recovery of Irrigation Investment Costs", requested that information should be provided annually showing the present value of UCRBF revenues to assist irrigation repayment under existing schedules, and the present value of a straight-line amortization of UCRBF revenue payments. The IG analysis of straight-line amortization of UCRBF repayment assistance was based upon the apportionment specified in Section 5 (e) of the CRSP Act to be applied annually as was established by the May 21, 1958 Financial and Economic Report to Congress on CRSP. The January 24, 2011 MOA entitled "Concerning The Upper Colorado River Basin Fund", among Reclamation, Western Area Power Administration and the Upper Basin States, discontinues the annual application of the apportionment making a comparison impracticable.
- 3/ Based on 78,530 acres of agricultural land in the Coachella Valley taken from 1996 crop census. Balance of irrigation investment is non-reimbursable since Reclamation is using the facilities to meet salinity requirements under the Mexican Water Treaty. In October 2003, the contract was amended to add provisions of Title II of the San Luis Rey Indian Water Rights Settlements Act. These provisions made the repayment non-reimbursable during the planning, design, and construction works associated with the settlement act and during the period that the Indian Water Authority and the local entities (as defined in Section 102 of the settlement act) receive up to 16,000 acre-feet of water conserved by the works. As a result of these provisions, all of the repayment by Coachella Valley Water District is expected to be non-reimbursable.
- 4/ The annual operation and maintenance cost exceeds payment capacity under the current allocation. Federal funds were not included for irrigation development in the Dakota Water Resources Act of 2000.

Project	Status
Arizona Water Settlements Act (AWSA)	Arizona Water Settlements Act – National Environmental Policy Act (NEPA) compliance will be undertaken for specific federal actions required to implement the Act. A final Environmental Assessment (EA) and Findings of No Significant Impact (FONSI) for Phase 1 rehabilitation of the San Carlos Irrigation Project (SCIP) water delivery system was issued in August 2010. An Environmental Impact Statement (EIS) has been initiated for rehabilitation of the Phase 2 portion of the SCIP system. Issuance of the draft EIS has been delayed. Compliance for other implementation actions will be scheduled as appropriate.
Arkansas Valley Conduit (AVC) ECAO	The AVC EIS Notice of Intent (NOI) was filed on July 30, 2010, and public scoping concluded September 13, 2010. The draft EIS documents the analysis of potential environmental consequences associated with construction, operation, and repayment of the proposed AVC (a municipal and industrial water supply project), a conveyance contract for the Pueblo Dam north-south outlet works interconnect, and a long-term excess capacity master contract for storage of non-project water in Pueblo Reservoir. The AVC is a congressionally authorized feature of the Fryingpan-Arkansas Project that was not completed as part of the original Fryingpan-Arkansas Project construction. The Final EIS was completed in August 2013. The Record of Decision (ROD) was signed in February, 2014.
Cachuma Project	Final Program and Project specific Environmental Impact Statement/Environmental Impact Record (EIS/EIR) - Lower Santa Ynez River Fish Management Plan and Cachuma Project Biological Opinion for southern steelhead trout ROD was signed on October 25, 2004. Ongoing actions relating to steelhead recovery are largely covered, but some project specific NEPA will be required as projects are developed. Resource Management Plan Draft EIS was made available for public review between July and August 2008. A public open house was held August 2008. The final EIS was released May 19, 2010. The 30-day cool off period started May 28, 2010. The ROD (10-112) was signed May 27, 2011. The document is available on our website:
	http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=283 The Fish Management Plan EIS/EIR was finalized (copy on file).
	The 2000 Biological Opinion's (BiOp) reference number is F-SW3EJS. Consultation with National Marine Fisheries Service (NMFS) has been initiated. A draft Biological Assessment was sent to NMFS on November 21, 2013. Reconsultation efforts are ongoing. NMFS expects a draft BiOp will be published in February 2016. Site specific NEPA may be needed for proposed operation and maintenance activities and or creek passage improvement projects.

Project	Status
	The South Coast Conduit/Upper Reach Reliability Project (Secondary Parallel Pipeline) EIS/EIR initiated December 2006. Notice of Intent published in Federal Register in April 2007. Scoping meeting was held May 17, 2007. Draft schedule agreed upon July 2007.
	The Secondary Parallel Pipeline project EIS/EIR has been finalized. The Final EIS/EIR was mailed to recipients, December 3, 2010. The National Oceanic and Atmospheric Administration and press release and Final EIS/EIR were released December 10, 2010. Cultural Resources received a letter of concern from the Chumash Tribes regarding impacts to historic sites which has been addressed. Additional cultural resource identification efforts were completed and the State Historic Preservation Officer (SHPO) consultation letter was drafted and sent out. Response from SHPO was received around the end of the 30-day cool off period for the Final EIS/EIR. Section 106 National Historic Preservation Act (NHPA) consultation was completed. The ROD was signed May 11, 2011. Since issuance of the ROD, Cachuma Operation and Maintenance Board (COMB) has faced budget constraints that require phasing of the project. In order to do phasing, COMB has modified the original project in order to construct a portion of the project in an initial phase that would connect approximately 8,000 feet of the proposed pipeline from the SPTT directly to the Glen Anne Turnout rather than build the entire project at one time. Under the modified project, Reclamation will still issue easements to COMB as the project would occur within our rights-of-way and issue MP620 permits for modification to federal facilities. Modifications proposed by COMB are within the existing easements and alignments as those identified in the Final EIS/EIR and are within the same project footprint as consultation for Endangered Species Act (ESA) and NHPA. As modifications of the project are consistent with those analyzed in the Final EIS/EIR and do not constitute substantive changes to the project description, it was determined that no further environmental compliance is needed at this time and the Final EIS/EIR and ROD covers the proposed changes.
	It was determined that Reclamation had limited federal nexus over COMB's Mission Creek South Coast Conduit Crossing and Fish Passage Improvement Project and that the U.S. Army Corps of Engineers (Corps) had the greater nexus. Since 2009, COMB has been trying to work out details for the fish passage improvement portion of the project with the California Department of Fish and Wildlife, U.S. Fish and Wildlife, and NMFS. A project description has still not been developed nor has funding been obtained by COMB. Consequently, the Corps has cancelled the project and is no longer taking the lead. The South Coast Conduit (SCC) still needs to be reburied where it is exposed at Mission Creek. Reclamation has included this crossing, along with several others, as part of its reconsultation with NMFS for the Cachuma Project. Once a project description is provided, Reclamation will complete environmental compliance for the maintenance project at the crossing. COMB completed the project in 2015 without informing Reclamation. NEPA was completed for the COMB's 2014 Emergency Drought Contingency Plan on June 13, 2014. NEPA was completed for upgrades to four-air vents and air release upgrades along the SCC in May 2015.

Project	Status
	A Draft EA is being prepared for the City of Santa Barbara's long-term Warren Act Contract (Pass Through Agreement). Estimated release for public review in early 2016.
Central Arizona Project (CAP)	Project wide - Final EIS filed September 26, 1972. Additional activity-specific NEPA compliance documents were completed on all project activities prior to implementation. Current NEPA compliance activities include EA's for ESA-mandated fish barrier projects which are being constructed as part of the CAP (O'Donnell Canyon EA projected in 2016). NEPA compliance activities continue for the Indian Distribution Division of CAP. An EA was completed for the San Xavier Cooperative Farm Rehabilitation Project in July 2005. An EA on the San Xavier farm extension project was initiated in 2012 but was suspended pending negotiation of a lease agreement between the San Xavier Cooperative Farm and Indian allottees. A 638 Contract was signed in late calendar year 2011 with Yavapai-Apache Nation (YAN) for design and environmental compliance for YAN's plans for its CAP water delivery system (using an exchange), and YAN has hired an environmental consultant to prepare the requisite EIS; public scoping will be initiated in FY 2017. Environmental compliance for the Tonto Apache system is not currently scheduled. A final EA was issued for the Casa Blanca segment of the Pima-Maricopa Project on the Gila River Indian Community in May 2013. NEPA compliance schedules for the remaining portions of the Indian Distribution Division will be determined as required.
Central Valley Projects (CVP): American River Division Auburn-Folsom South Unit	A project wide final EIS was filed with the Council on Environmental Quality (CEQ) November 13, 1972. Supplement to final filed with CEQ August 6, 1973, Amendment to final filed with CEQ September 20, 1974. Supplemental No. 2 filed with the Environmental Protection Agency (EPA) September 23, 1980. Foresthill Divide area Final Environmental Statement (FES) was filed with the CEQ May 25, 1976. Reclamation and the Sacramento Metropolitan Water Authority wrote a draft EIS/draft EIR on the American River Water Resources Investigation in February 1996. Reclamation completed the Final EIS in November 1997 and issued a Record of Decision (ROD) in June 1998. The decision was to not take any action at this time, but Reclamation will cooperate with any local agency if there is potential Reclamation involvement. A Final EIS/EIR was released June 14, 2002 for the Placer County Water Agency American River Pump Station Project Other NEPA documents issued related to the Auburn-Folsom South Unit include Folsom South Canal International Drive Extension Kilgore to Sunrise Project Initial Study and EA FONSI 08/29/08, Central California Area Office Building Replacement Project, Folsom Complex FONSI 02/06/09, and North Fork Pipeline Raw Water Bypass Pipeline Project FONSI 07/30/09.
	EIS/EIR for the Nimbus Hatchery Fish Passage Project: draft completed October 2010, final available August 2011; U.S. FWS B.O. received October 2011; NMFS BiOp received August 2012; ROD approval and signature April 2013.

Project	Status
	2016-2018 American River Division Interim Water Service Contract Renewal for the Placer County Water Agency Draft Environmental Assessment issued for public review in December 2015.
	Sweeney/McCune Creek Outflow Recovery and Automation Project Draft Environmental Assessment/Initial Study issued for public review in December 2015.
	An EIS/EIR will be prepared for the Auburn Resource Management Plan-General Plan (RMP-GP). NOI issuance expected in Spring 2016.
	The following have been completed:
	2015 American River Division Interim Water Service Contract Renewal for the City of Roseville EA/FONSI 12/17/2014; 2015 American River Division Interim Water Service Contract Renewal for the Sacramento County Water Agency EA/FONSI 12/17/2014; Lake Natoma Waterfront Trail Project EA/FONSI 12/22/2014; Sacramento Suburban Water District 2014 - Water Use Efficiency Grants EA/FONSI 1/6/2015; Sacramento Municipal Utility District Five-Year Temporary Warren Act Contract EA/FONSI 3/1/2015; Warren Act Contract for Storage and Conveyance of Non-CVP Water from Foresthill Public Utility District to Santa Clara Valley Water District in 2015 EA/FONSI 4/30/2015; Nimbus Dam Radial Gates Maintenance Project EA/FONSI 6/15/2015; Folsom Lake State Recreation Area General Plan/Resource Management Plan EIS/EIR ROD 10/27/2015; City of Sacramento Water Meter Retrofits and Expansion of the River Friendly Landscaping Program EA/FONSI 11/24/2015.
American River Division Long-Term Contract Renewal	Draft EIS was issued in March 2005 and the final was issued in July 2005. ROD was issued in February 2006 that supported the execution of three out of seven long-term water service contracts.
	EA and FONSI for interim renewal contracts for CVP water for the city of Roseville, Sacramento Municipal Utility District and Sacramento County Water Agency were signed and available to the public December 2014.
	The following have been completed:
	Folsom Dam Road Access Restriction EIS/ROD 5/31/05; Lake Berryessa Visitor Services Plan EIS/ ROD 6/2/06; Joint Federal Project and Safety of Dams EIS/EIR/ROD 5/1/07; Supplemental EA/IS for the Folsom DS/FDR: Dike 5 Site Access and Trail Detour and the Auxiliary Spillway Stilling Basin Cofferdam FONSI 4/14/09; Placer County Water Agency water

Project	Status transfer to San Diego County Water Agency EA and FONSI 7/10/09; Lake Berryessa Wastewater Treatment EA/ FONSI
	5/27/10; New Melones Resource Management Plan/EIS/ ROD 6/3/10; EL Dorado I.D.EA/FONSI 6/18/10; Mormon Island Final EIS/ ROD 6/18/10; Nevada Irrigation District Mt. Vernon Siphon Final EA and FONSI 9/1/10; Nimbus Hatchery Fish Passage Project Draft EIS/EIR 9/24/10; Napa Berryessa Resort Improvement District – Water and Wastewater Treatment Upgrades and Expansion EA/FONSI signed 02/21/13; Temporary Warren Act Contract Between the United States and Placer County Water Agency EA/FONSI signed 04/02/13; Release of Oakdale I.D. and South San Joaquin I.D. Water from New Melones Reservoir EA/FONSI signed 04/08/13; Interim Recreation Services at Lake Berryessa EA/FONSI signed on 05/01/13; New Melones Lake Concession Development EA/FONSI signed 08/28/13; EA and FONSI for the temporary Warren Act Contract with Sacramento Municipal Utility District was signed in December 2012 and EA and FONSI for the temporary Warren Act contract with El Dorado Irrigation District was signed December 2014.
CVP-East Side Division	
Solano Project Special Project – Folsom Safety of Dams	Lake Berryessa Recreation Areas Development EA and FONSI to be completed in 2016. Safety of Dams Modifications to Dike 1 EA and FONSI December 24, 2014.
Mendota Pool Group Exchange Program	The Mendota Pool Group 10-year exchange program expired February 2015. An EIS/EIR is being prepared for a proposed 20-year extension. The draft EIS/EIR is estimated to be released for public review in mid to late 2016. An EA was completed in May 2015 for a temporary three-year extension of the current program pending completion of the EIS/EIR.
South of the Delta Accelerated Water Transfer Program	Five Year South-of-Delta Accelerated Water Transfer Program EA (EA-10-051) completed February 15, 2011. This program is set to expire in 2016. A new EA (14-064) has been released for public review to cover another five years.
Contra Loma Recreation Area Resource Management Plan	A Final EIS and Resource Management Plan (RMP) for the Contra Loma RMP was released for public comment on September 30, 2014. A Record of Decision was completed in April 2015.
Delta Long-Term Renewal Contracts	Final EA and FONSI (04-023) for Delta Division long-term contract renewals was completed on February 25, 2005. A few of the contracts were not signed and have required NEPA compliance for interim renewal contracts every two years since.
Mercy Springs Water District Assignments to Westlands Water, Santa Clara Valley Water District and Pajaro Valley Water	An EA for the Mercy Springs assignment to Westlands, Santa Clara and Pajaro was completed March 9, 1999. Environmental compliance for long term contract renewal for this assignment has not been completed due to ESA issues regarding biological opinions by the U.S. Fish and Wildlife Service and NMFS for the CVP/SWP Coordinated Operations. The contracts have

Project	Status
District Long-Term Renewal Contract Portion	required NEPA compliance for interim renewal contracts every two years since.
	A draft EIS was prepared for the proposed conveyance of tertiary-treated recycled water from the cities of Modesto and Turlock through the Delta-Mendota Canal for use by Del Puerto Water District and south-of-Delta Central Valley Project
North Valley Regional Recycled Water Program	Improvement Act (CVPIA) designated wildlife refuges. The final EIS was released on September 15, 2015. No comments were received during the cool off period. However, the EPA did provide a comment letter on September 27, 2015 stating that they had "no objection" to the project as described in the final EIS and that the final EIS and response to comments addressed all of their concerns previously submitted on the Draft EIS. Per Reclamation policy (Regional Letter 13-09), the Record of Decision will not be signed until the proponents provide their National Pollutant Discharge Elimination System (NPDES) permits for the project. The State Water Resources Control Board will consider adopting the order for the NPDES permits during their February 2016 board meeting.
Cross Valley Contractors	The Cross Valley Contractors' long-term contract renewal EA (03-109) was cancelled due to ESA issues regarding biological opinions by the U.S. Fish and Wildlife Service and NMFS for the CVP/SWP Coordinated Operations. The contracts have required NEPA compliance for interim renewal contracts every two-years since. Reclamation is currently initiating NEPA compliance for the long-term contract renewals and long-term conveyance agreement. NEPA compliance for Cross Valley Contractors' interim renewal contracts will also be prepared should a long-term contract not be executed prior to the expiration of the current interim renewal contracts.
Misc. Delta Division Projects	An EA (12-060) was completed January 10, 2013 for the 10-year Delta-Mendota Canal (DMC) groundwater pump-in program. The EA requires review of the program every five years to determine if conditions have changed prior to issuing a second five-year Warren Act contract.
	An EA (15-020) was completed May 28, 2015 for the San Luis-Delta Mendota Water Authority's proposal to reverse flow the upper portion of the DMC to address water supply shortages due to severe drought.
	EAs (14-031 and 15-040) were completed in 2014 and 2015, respectively to temporarily change water quality requirements for groundwater introduced into the DMC pursuant to the DMC groundwater pump-in program (EA-12-060) in order to address water supply shortages due to severe drought.
Friant Division	Millerton Lake Resource Management Plan and General Plan Final EIS published April 30, 2010. The ROD was signed November 4, 2011.
Miscellaneous Friant Division Project	An EA (14-011) was completed on May 2, 2014 for a two-year groundwater pump-in program for the Friant-Kern Canal to

Project	Status
Programs	address severe drought conditions. A second EA has been released for public review to cover another five-year period for seven Friant Division contractors and one non-CVP contractor.
	EAs (15-015 and 15-034) were completed for exchanges of San Joaquin River water released from Millerton Lake for delivery to the San Joaquin River Exchange Contractors to address severe water supply shortages within the Friant Division.
	Orange Cove Irrigation District (OCID) Powerhouse at Friant Dam project cancelled November 2007 per request by OCID. EA 07-41 Cancelled. Completed as a Categorical Exclusion 09-095 on April 13, 2012. Additional environmental review was completed on July 29, 2015 for Pacific Gas and Electric Company to provide power to facility (not covered by Federal Energy Regulatory Commission or previous environmental review for this action).
Friant Division Accelerated Water Transfer Program	The most recent Friant Division Five year Accelerated Water Transfer Program (AWTP) EA and FONSI was completed February 11, 2011 (EA-10-052). A supplemental EA (11-063) was prepared to increase the total quantity for the current AWTP which was completed December 2011. This program is set to expire in 2016. A new EA will be drafted to cover another five years.
Madera Irrigation District (MID) Madera Ranch Water Supply Enhancement Project EIS	U.S. Fish and Wildlife Service & U.S. Army Corps of Engineers (Corps) are cooperating agencies. Final EIS was released June 6, 2011. ROD signed August 1, 2011. Madera Irrigation District (MID) has requested a time extension from the Crops for Permit SPK-2004-00284 (404 permit) which expires September 9, 2016 as the project will be under construction well past the 2016 expiration date. The Corps is willing to extend the permit providing all of the conditions of the existing permit are met – a conservation easement has been placed over the mitigation areas, the endowment has been fully funded, status of the created wetlands is shown, and that the land is being managed by a third party, these are still pending. Additional surveys for listed species will also be required. The extension of the 404 permit will also allow an extension of MID's 401 certification which expired September 2015.
Sacramento River Division	Tehama-Colusa Canal, June 7, 1972; Tehama-Colusa Canal Supplemental, May 15, 1975. The final EIS/EIR for the Fish Passage Improvement Project at the Red Bluff Diversion Dam was released in May 2008, and the Record of Decision was signed on July 17, 2008. Construction was initiated in FY 2010 and substantial completion was achieved in FY 2012.
Sacramento River Settlement Contracts	Draft EIS and biological assessment went out to the public on October 1, 2004. Final EIS out to the public on December 17, 2004. Record of Decision (ROD) signed. February 28, 2005. ROD for Natomas Mutual Water Co. signed March 9, 2005; revised Natomas ROD May 5, 2005; and ROD for City of Redding and Anderson-Cottonwood Irrigation District signed July 1, 2005.

Project	Status
Sacramento River Water Reliability Study San Felipe Division	This environmental document has been placed indefinitely on hold. A project wide FEIS was filed with the Council on Environmental Quality (CEQ) March 8, 1976. Negative determination for conveyance system modification signed March 20, 1978. Reclamation completed an EIS for Pajaro Valley Water Management Agency's (PVWMA) Basin Management Plan Update; construction of the pipeline on indefinite hold pending PVWMA initiation. The proposed action includes the connection of a pipeline to the Santa Clara Conduit, and the delivery to and the use of CVP water in the Pajaro Valley. EIS 01-82 completed September 10, 2002. San Justo Land Acquisition EA project initiated December 2006. EA-06-141 for the San Justo land acquisition was completed and FONSI signed May 2007. Santa Clara Valley Water District Pipeline Maintenance Program Draft EA (06-110) was posted for public review November 9, 2007. Finalization of the EA has been pending receipt of a biological opinion from the service agency since then. This has resulted in smaller projects being generated to keep facilities in good working order. An EA (12-070) is being prepared for pipeline access improvements along the Pacheco and Santa Clara Conduits and another EA (15-059) is being prepared for maintenance of the Pacheco Conduit. A Categorical Exclusion Checklist (15-044) was completed on August 17, 2015 to address a breach of the Santa Clara Conduit that occurred on August 8, 2015. An EA (09-010) was prepared for the San Justo Zebra Mussel Eradication Project and released for public review. Currently addressing the two comment letters received. Finalization of the EA is pending completion of ESA consultation and completion of an eradication/management plan by Denver Technical Service Center. San Luis Reservoir Low Point EIS to provide better water quality to Districts serviced by the Pacheco Tunnel (in the San Felipe Division) and Low Point in San Luis Reservoir. Notice of Intent published August 29, 2008. Region circulated the document and SCCAO provided comments.
West San Joaquin Division San Luis Unit	A project wide environmental statement was filed with the CEQ October 4, 1972. A draft supplement to the final was filed with the CEQ July 30, 1979. A draft environmental statement for cleanup and closure of the San Luis Drain and Kesterson Reservoir was filed with the EPA April 30, 1986; final filed October 20, 1986. A draft Environmental Statement, as a result of

Project	Status the Barcellos Judgment, was filed with the EPA December 20, 1991. This plan was not accepted as far as compliance with the Barcellos Judgment. Recent court decisions affirmed Interior's responsibility to address the drainage problem. In 2001,
	Reclamation began evaluating alternatives to provide long-term drainage service to the San Luis Unit. A Draft EIS was issued for public comment in May 2005; a Final EIS was released in June 2006; a ROD was signed March 2007. Per consultation with Department of Justice, Reclamation has begun implementing the action identified in the ROD in the northerly area. Discussions with Westlands on where to place drainage service was reinitiated but was stalled pending settlement of litigation. A settlement with Westlands has since been reached.
Miscellaneous San Luis Unit Projects	Grassland Bypass Project Extension to 2019 EIS – ROD signed December 2009.
Programs	An EA (15-001) was completed for a Westlands groundwater pump-in program for the San Luis Canal. A FONSI was signed June 5, 2015.
San Luis Unit Long-Term Contract Renewal	A draft EIS for San Luis Unit long-term contract renewals was released for public comment between October 7, 2005 and November 25, 2005. The project was put on hold due to ESA issues regarding biological opinions by U.S. Fish and Wildlife Service and NMFS for the CVP/SWP Coordinated Operations and a final EIS was never completed. The contracts have required NEPA compliance for interim renewal contracts every two years since.
B.F. Sisk Safety of Dams EIS/EIR	A corrective action study is currently underway to develop a project description (PD). Once the PD is developed an EIS will be prepared for the project by the regional office. Estimated to be released in 2018.
San Luis Reservoir and Los Banos Creek State Recreation Area Joint General Plan and Resource Management Plan	The Final EIS/EIR was completed June 24, 2013. The ROD was completed on April 4, 2014.
Los Banos Creek Diversion Project	A draft EA (12-060) was released for public review in November 2014. A FONSI was signed March 13, 2015.
Shasta Division	Congress authorized a feasibility study for the potential enlargement of Shasta Dam and Reservoir in P.L. 96-375 (1980) and again in P.L. 108-361 (2004) consistent with the CALFED Bay-Delta Programmatic Record of Decision (2000). Reclamation's Mid-Pacific Region initiated the current feasibility study in FY 2002; published a Notice of Intent to prepare an

Project	Status EIS in October 2005; and conducted public scoping meetings in the Fall of 2005. A preliminary draft feasibility study and EIS are in development.
Trinity River Restoration Program	Final EIS for Trinity River Mainstem Fishery Restoration released November 17, 2000. Record of Decision (ROD) signed December 19, 2000. Programmatic coverage for all sites was completed in 2009 and the final programmatic Master EIR/EA included site specific NEPA/CEQA coverage for eight channel rehabilitation projects (the remaining Phase I projects) which were completed in 2010. Beginning in 2011, an Environmental Assessment/Initial Study (EA/IS) document that tiers off the Final EIS and the Final Programmatic EIR have been completed for subsequent Phase II projects. Two EA/IS documents were completed for channel rehabilitation projects implemented in 2015: the Limekiln Gulch site and the Upper Douglas City site. Project activity at the Upper Douglas City site completes the second phase of the Douglas City Channel Rehabilitation Project that began in 2013. A total of 33 of the 47 EIS identified Channel Rehabilitation projects have been implemented. Draft EA/IS documents are currently in the NEPA process for two projects proposed for implementation in 2016. It is expected that 35 of the 47 sites will be completed in 2016.
Colorado River Basin Salinity Control Project - Title I Division	A project-wide final Environmental Statement (ES) was filed with the CEQ on June 18, 1975 for the construction and operation of the Yuma Desalting Plant. A subsequent EA was prepared and distributed for public comment in May 2009 and finalized in August 2009 for the one-year pilot run of the Yuma Desalting Plant. Based on the EA, the FONSI was signed by the Yuma Area Office on September 30, 2009. Applicable NEPA documentation will be completed before any future operations of the Yuma Desalting Plant is undertaken.
Colorado River Basin Salinity Control Project - Title II Division	A Notice of Intent to Prepare an EIS for the Paradox Valley Unit, Colorado, was published in the FR in 2012. This EIS will be ongoing in FY 2017. The schedule currently calls for the distribution of the Final EIS in the second quarter of 2018.
Colorado River Storage Project - Glen Canyon Dam	A Notice of Intent to Prepare an EIS for the Long Term Experimental and Management Plan for the Operation of Glen Canyon Dam, Arizona, of the Colorado River Storage Project was filed 7/6/2011. This EIS is ongoing in FY 2016. The draft EIS was released January 8, 2016. As there is no funding for the EIS in FY 2016, publication of the final EIS and ROD may have to be completed in FY 2017.

Project	Status
Lewis and Clark RWS - DKAO	The project sponsor has completed the Final Engineering Report (FER), Water Conservation Program Plan and the EA. The FONSI was signed on March 5, 2003.
Lewiston Orchards Project Water Exchange and Title Transfer Project	Reclamation initiated formal NEPA scoping for the LOP Water Exchange and Title Transfer Project in September 2015. The final Environmental Assessment is scheduled to be completed in September 2016.
Minidoka Spillway Replacement, Idaho	EIS was prepared to evaluate the environmental impacts and benefits of rebuilding the dam and spillway. Final EIS was published on August 8, 2010 and a ROD was signed September 27, 2010.
Mni Wiconi Project DKAO	NEPA decision document (FONSI) was completed in October 1993. An amendment was signed in June 1995.
Navajo-Gallup Water Supply Project	The Final EIS for Navajo-Gallup Water Supply Project was filed with the EPA on July 6, 2009. The Record of Decision was issued on October 1, 2009. The project was analyzed at the appraisal level under this FEIS. As designs are finalized by reach, NEPA sufficiency reviews will be undertaken to determine if supplemental NEPA is required.
North Central Montana Rural Water Project MTAO	The EA and a FONSI was signed by the Bureau of Reclamation and Bureau of Indian Affairs on January 3, 2005.
Pick-Sloan Missouri Basin Project DKAO Garrison Diversion Unit	Project wide Final Environmental Impact Statement (FEIS) on the 250,000-acre plan was filed with the CEQ January 10, 1974. Supplemental Fish and Wildlife filed with the CEQ on May 3, 1974. Final comprehensive supplemental to FES filed with EPA on March 7, 1979. The Final Supplemental Environmental Statement on features for initial development of 85,000 acres on the 250,000-acre plan was filed with the EPA on July 15, 1983. A draft environmental statement addressing the Garrison Commission recommendations was filed with the EPA on March 6, 1986. A draft supplement to the Draft Environmental Statement was filed with the EPA on December 30, 1986. The reformulated project FES will not be pursued further due to deferral of work associated with non-Indian irrigation. In the interim, all project activities will comply with NEPA requirements as necessary. The Dakota Water Resources Act requires an EIS be completed for the Red River Valley Water

Project	Status
	Supply feature. The Final EIS for the Red River Valley Water Supply project was released December 28, 2007. A Record of Decision was prepared and provided to the Secretary of the Interior for signature in January 2009. The Secretary of the Interior deferred signing a ROD concluding it would be more appropriate to wait until Congress authorized construction of the project features identified in the FEIS. Specific EA's have been completed for each Tribal and State MR&I project. Reclamation completed the FEIS and signed a ROD in 2009 for the Northwest Area Water Supply project. The Province of Manitoba, Canada and the State of Missouri filed suit challenging the adequacy of the FEIS. In 2010, the U.S. District Court
	remanded the case to Reclamation for further evaluation of potential impacts and consequences. Department of Interior and the Department of Justice decided not to appeal the Court's decision. In April 2015 Reclamation released the Final Supplemental Environmental Impact Statement and a ROD was issued in August 2015. This completes the requirements of the NEPA and fulfills Reclamation's obligation under the court. Because of the ongoing litigation and the injunction in place preventing any construction activity on the Project, the District Court will need to rule on the adequacy of Reclamation's environmental analysis before construction of the selected alternative can move forward.
Pojoaque Basin Regional Water System, New Mexico	A Notice of Intent to prepare an EIS on the Pojoaque Basin Regional Water System (RWS) was published in the FR on 2/24/2012. Public Law 111-291, Sections 616-617, called for NEPA compliance to be completed by the end of 2016. The schedule is to issue the draft EIS in 2016, the final EIS in late 2016 with a record of decision early in 2017.
Rio Grande Project, Continued Implementation of the Operating Agreement	A notice of Intent to prepare an EIS for the continued implementation of the 2008 operating agreement for the Rio Grande Project was filed in the FR on 1/15/2014. A draft EIS is expected to be issued in the spring of 2016, and a final at the end of calendar year 2016. There is some chance that substantial public comments or litigation issues could delay issuance of a Record of Decision until early 2017; however, the schedule calls for this NEPA process to be completed in 2016.
San Carlos Water Settlement Act	NEPA compliance schedule will be determined as required.
San Jose Area Water Reclamation Program	The San Jose Area Water Reclamation and Reuse Program consist of several phases, each of which requires NEPA compliance. Phases 1A, 1B, 1C, and 1D are completely covered by existing NEPA compliance documents. Anticipated new activity not covered under existing NEPA compliance documents will be analyzed under future compliance analyses and determinations, as necessary.

Project	Status
Ventura River Project	Final EIS for the Casitas Resource Management Plan was published April 4, 2010 and a ROD was signed on April 11, 2011.
Yakima River Basin Water Enhancement Project	A programmatic EIS was prepared to evaluate the basin wide environmental impacts/benefits of the water enhancement facilities. An ROD was issued on March 10, 1999. Final EIS for the fish passage project was published April 15, 2011 and a ROD was signed on August 12, 2011.
Cle Elum Fish Passage, Washington Yakima River Basin Integrated Water Resource Management Plan, Washington	A programmatic EIS was prepared to evaluate the basin wide environmental impacts/benefits of the integrated water resource management plan. A Record of Decision was issued on July 11, 2013.

Animas-La Plata Project

The downsizing of the Animas-La Plata Project to an all M&I project and the provision in P.L. 106-554 allowing up-front cost-sharing of non-tribal payment obligations required the modification or replacement of existing repayment contracts with the non-tribal entities. Appropriate agreements were executed in November 2001 with the San Juan Water Commission, New Mexico and the Colorado Water Resources and Power Development Authority to allow the up-front cost sharing. A repayment contract with La Plata Conservancy District (NM) was executed in 2009 and a repayment contract with the State of Colorado was executed in 2012. P.L 108-447, Consolidated Appropriations Act, 2005 limits the non-tribal repayment obligation to \$43 million, of the first \$500 million (January 2003 price level) of the total project costs plus indexing. P.L. 109-148, December 30, 2005, amended the non-tribal repayment language of P.L. 108-447, by providing a technical correction. Consultations with repayment entities, as required by P.L. 106-554, are in progress. Water delivery contracts, essentially nonreimbursable repayment contracts, with the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe have been drafted, and a final draft contract with the SUIT is complete and awaiting execution. A final cost allocation will be determined following the closeout of the last construction contracts.

Central Arizona Project (CAP)

A repayment contract with the Central Arizona Water Conservation District (CAWCD) was executed on December 15, 1972, and validated on May 24, 1983. An amended contract with the CAWCD was executed on December 1, 1988, and validated on January 7, 1991. The water supply system stage of the Central Arizona Project (CAP) was placed into repayment status in October 1993, followed by the regulatory storage stage, in October 1996. Following months of unsuccessful formal negotiations between the Bureau of Reclamation and CAWCD over a variety of CAP repayment contract and operation and maintenance issues, CAWCD filed suit against the U.S. on July 10, 1995. The U.S. filed a countersuit on August 18, 1995 in the U.S. District Court. On September 20, 1995, the complaints were consolidated in the U.S. District Court with the CAWCD suit as the complaint and the U.S. suit as a counter claim. For the court proceedings, the issues in dispute were divided into six phases: (1) Repayment Ceiling; (2) Cost Allocation; (3) Development Fund Administration; (4) Water Delivery Issues; (5) Construction Defects and Miscellaneous Claims; and (6) Billing Disputes. The Court heard phase 1 in August of 1998 and on November 3, 1998, issued a phase 1 order, ruling in favor of the CAWCD. The ruling determined that the 1988 amended repayment contract limits CAWCD's repayment obligation for stages 1 and 2 to \$1.781 billion unless a further amendment to the contract is executed changing that obligation. The United States was also enjoined from barring CAWCD from utilizing CAP facilities. Phase 2 of the trial was conducted in November of 1998. Shortly after the phase 2 court proceedings, negotiations were initiated to reach a settlement outside of the courts. The court, in deference to negotiations, did not issue a phase 2 ruling. The Department of Justice successfully negotiated a Stipulated Settlement that contains a number of conditions that must be achieved within three years to allow final settlement of the case. The Court issued an order on May 9, 2000, staying litigation for three years to allow the conditions of the Stipulated Settlement to be achieved. On April 9, 2003, CAWCD and the United States agreed to extend the date to complete these conditions. On December 10, 2004, the President signed PL 108-451, the Arizona Water Settlements Act. The Act was fully enforceable on December 14, 2007, which resolves the disputed project repayment issues.

Under the revised plan for the third stage of repayment, Tucson Reliability, the northwestern entities and San Xavier District each have reliability features. Final plans for the remaining entities, the City of Tucson, Sif Oidak, Schuk Toak and Pascua Yaqui Tribes, have not been developed, however estimates for the Black Wash reservoir were revised to reflect the reduced capacity requirement. The City of Tucson and the smaller water providers reached an agreement with CAWCD to address reliability for their CAP water supply. The Black Wash feature, while re-estimated, is still tentative and may not be further developed if the current planning efforts of entities and Reclamation results in more cost effective reliability options. The sum of the current cost estimates for these three reliability features exceeds the Stage III repayment ceiling. Negotiations have started, as required under the Stipulated Settlement, to address repayment of the third stage prior to initiating construction activities for the northwest entities. Repayment is non-reimbursable under the Arizona Water Settlements Act for the San Xavier District feature.

Except for Indian Tribes with approved water right settlements, repayment contracts with the Indian communities must be executed before initiation of construction. The Gila River Indian Community divided its obligation into phases to expedite construction. The repayment contract for Sacaton Ranch was executed March 15, 1995; the master contract for the remaining Gila River Indian Community facilities was executed July 20, 1998. The Arizona Water Settlements Act subsequently eliminated any repayment requirement for the Gila River Indian Community and the Tohono O'Odham Nation. The repayment contracts for the remaining Indian Distribution System will be executed as required.

Central Arizona Project (CAP) (Continued)

Construction of the Non-Indian Distribution System was accomplished under Section 9(d), Reclamation Act of 1939. Ten non-Indian distribution system repayment contracts have been executed and validated. The repayment contracts for Maricopa-Stanfield Irrigation and Drainage District, Central Arizona Irrigation and Drainage District, and New Magma Irrigation and Drainage District were executed on November 21, 1983, and validated on November 23, 1983. The Harquahala Valley Irrigation District contract was executed January 6, 1984, and validated on April 26, 1984; Chaparral City Water Company contract was executed December 6, 1984, and validated on March 25, 1985; Hohokam Irrigation and Drainage District contract was executed on April 4, 1985, and validated August 13, 1985; Chandler Heights Citrus, San Tan and Queen Creek Irrigation Districts contracts were executed December 30, 1985, and validated February 14, 1986; Tonopah Irrigation District contract was executed April 8, 1985, and validated July 24, 1985. To facilitate Indian Water Right Settlements in Arizona, Congress granted the Secretary of the Interior the authority to extend, on an annual basis, the repayment schedule of debts incurred under Section 9(d) of the Act of August 2, 1939 (43 USC 485h(d)) by irrigation districts which have contracts for water delivery from the Central Arizona Project. This authority was provided in the FY 2004 Energy and Water Appropriations Bill, P.L. 108-137, Sec. 216(1). Central Arizona Irrigation and Drainage District, Chandler Heights Citrus Irrigation District, Maricopa Stanfield Irrigation & Drainage District, New Magma Irrigation and Drainage District, Queen Creek Irrigation District, San Tan Irrigation District and Tonopah Irrigation District requested and received extensions of the repayment debts. This occurred through December 2007 when the Arizona Water Settlements Act, enacted in 2004, became fully enforceable and the non-Indian Irrigation districts were relieved of remaining debt incurred for the repayment of constructions costs in exchange for relinquishing CAP non-Indian agricultural priority water. That Act makes \$73.6 million of the 9(d) remaining debt non-reimbursable to the districts and assigned repayment of the remaining portion of the debt to the Central Arizona Water Conservation District.

On December 3, 1992, the distribution system repayment contract with the Harquahala Valley Irrigation District was extinguished under authority of P. L. 101-628. The contract was amended to discharge Harquahala Valley Irrigation District's repayment obligation. The 13,933 acre-feet of Harquahala Valley Irrigation District's water was committed for the Fort McDowell Indian Water Rights Settlement Act. The remaining 19,318 acre-feet may be used by the Secretary of the Interior for other purposes including Indian Water Rights Settlements. Most of this remaining water is committed to the Gila River Indian Community under the Arizona Water Settlements Act. Title to the Harquahala Valley Irrigation District distribution system was transferred to the District on July 21, 2004.

On December 21, 1993, the Hohokam Irrigation and Drainage District signed an agreement with the cities of Chandler, Mesa, Phoenix, and Scottsdale; Central Arizona Water Conservation District; and Reclamation to assign its Central Arizona Project agricultural water to these cities. This fulfilled the United States obligations to secure Cliff Dam replacement water for the cities as required by congressional actions on Plan 6. The agreement also requires the cities to pay for the Hohokam Irrigation and Drainage District distribution system Federal indebtedness.

On January 18, 1994, the New Magma Irrigation and Drainage District declared Chapter 9 bankruptcy after Reclamation rejected the District's proposal to restructure the District's repayment obligation for construction of its Central Arizona Project water distribution system. The U. S. Bankruptcy Court issued a confirmation order on June 21, 1995, directing Reclamation to amend New Magma's repayment contract and restructure its repayment terms. The contract was amended November 22, 1996.

The Central Arizona Irrigation and Drainage District failed to make its February 1, 1994, distribution system payment. On August 12, 1994, the Central Arizona Irrigation and Drainage District filed Chapter 9 bankruptcy to reorganize its debts. Agreement was reached in bankruptcy court in 1996. An amended repayment contract was scheduled for April 1997; however, it was delayed in order to reorganize the debt. On March 4, 1999, the repayment debt and schedule were determined.

Central Arizona Project (CAP) (Continued)	On May 19, 1995, Maricopa-Stanfield Irrigation and Drainage District requested deferment of its semi-annual payments due August 1995 and February 1996. They also requested a deferment contract for restructuring its repayment debt to avoid petitioning for Chapter 9 bankruptcy. Reclamation granted the deferment contract. An agreement signed on June 28, 1996, changed the payout schedule from 26 to 39 years, allowing the District to meet the full repayment obligation.
	The repayment allocations recalculations for joint works were recalculated in 2004 resulting in an amended repayment contract for the San Tan Irrigation District. The amendment was executed in February 2005.
Central Valley Project (CVP)	The efforts to negotiate and execute long-term renewal contracts pursuant to the Central Valley Project Improvement Act (CVPIA) are ongoing and in various stages. The status of contract renewals as of December 30, 2015, is discussed below.
American River Division Auburn-Folsom South Unit	There are 8 water service contracts with entities in this unit. There are four long-term water service contracts, three of which (El Dorado Irrigation District, San Juan Water District and East Bay Municipal Utility District) were renewed in 2006. The City of Roseville, Placer County Water Agency, Sacramento County Water Agency, and Sacramento Municipal Utility District (SMUD) have entered into interim renewal contracts. With the exception of SMUD, long-term renewal contracts have been negotiated with the remaining entities and awaiting execution pending the acceptance of the biological opinion prepared for the Operations Plan and Criteria for the CVP. In addition, two new water service contracts (Fazio contracts) with SCWA and El Dorado County Water Agency, a new entity, remain to be negotiated.
<u>Delta Division</u> Delta-Mendota Canal	There were originally 24 contracts in this unit. Ten contracts (Davis WD, Hospital WD, Kern Canon WD, Salida WD, Sunflower WD, Mustang WD, Orestimba WD, Quinto WD, Romero WD, and Foothill WD) were assigned to Del Puerto WD. Three contracts (Broadview WD, Centinella WD and WidrenWD) were assigned to Westlands Water District Distribution District No. 1 (DD1), a contractor in the San Luis Unit. Portions of a third contract (Mercy Springs WD) were assigned to contractors in the San Luis (DD2) and San Felipe Units (Santa Clara Valley Water District), leaving 12 contractors and 14 contracts in this unit. Eleven long-term renewal contracts have been executed. One long-term renewal contract with the City of Tracy, which also includes two partial assignments from Banta-Carbona ID (5,000 af) and the West Side ID (5,000 af) was negotiated and executed in December 2013. Execution of the long-term renewal contract is dependent upon final acceptance of the Biological Opinion prepared for the Operations Plan and Criteria for the CVP.
Mendota Pool	There are eleven contracts in this unit. Of the eleven contracts, six are water service/settlement contracts, four are settlement contracts, and the remaining contract is a water service contract. A new settlement contract with Virginia L. Lempesis was executed in 2013.
Exchange Contractors	There are four exchange contractors (Central California ID, Columbia Canal Co., Firebaugh Canal Co. and San Luis Canal Co.) sharing one contract in perpetuity.

Central Valley Project (Continued)	
East Side Division New Melones Unit	There are two existing water service contracts with entities in this unit that expire in 2022. Negotiations to renew these contracts have not been initiated. In addition to the two existing contracts, subsection 3404(b) of the CVPIA authorizes the United States to enter into a new long-term water service contract with Tuolumne Utilities District, an entity located in this unit.
Friant Division Friant-Kern/Madera Canals	There are 34 contracts held by 32 entities in this division for Class I and/or Class II CVP water. Twenty-five long-term renewal water service contracts were executed in 2001, and three long-term renewal contracts were executed in 2005. Through a partial assignment approved in 2010, Kaweah Delta Water Conservation District became a long-term water service contractor. Five more partial assignments were executed in 2013. Pursuant to the San Joaquin River Restoration Settlement Act of March 30, 2009, the 29 long-term renewal water service contracts had the option to be converted to repayment contracts by December 31, 2010. Twenty-five contractors exercised this option in 2010. The City of Lindsay, City of Orange Cove, International WD, and County of Madera did not exercise the conversion option. All repayment obligations for distribution systems have been paid.
Friant Division Cross Valley Canal	There are 8 water service contracts with 7 entities in this unit. These entities have entered into interim renewal contracts. Negotiations for long-term renewal contracts with all of the Cross Valley Canal contractors are ongoing. Since conveyance facilities owned by the State of California (State) are needed to deliver the CVP water, a separate conveyance agreement with the State was completed in August 2014.
Hidden Unit	There is one contract in this unit. In 2001, Madera Irrigation District entered into a long-term renewal water service contract that provided the right to the entire conservation yield of the Hidden Unit. In 2010, the contractor exercised its option to convert to a repayment contract pursuant to the San Joaquin River Restoration Act of March 20, 2009.
Buchanan Unit	There is one contract in this unit. In 2001, Chowchilla Water District entered into a long-term renewal water service contract that provided the right to the entire conservation yield of the Buchanan Unit. In 2010, the contractor exercised its option to convert to a repayment contract pursuant to the San Joaquin River Restoration Act of March 20, 2009.
Sacramento River Division	
Black Butte Dam and Lake	There are six water service contracts with entities in this unit. Long-term renewal contracts were executed with five entities in 2005. The remaining entity, Elk Creek Community Services District, did not opt for early renewal of its contract. Elk Creek Community Services District will enter into interim renewal contracts pending execution of a long-term renewal contract. Final approval of the Biological Opinion for the Operations Plan and Criteria for the CVP is required before the long-term renewal contract can be executed.
Corning/Tehama-Colusa	There are 16 water service contracts with entities in this unit. Long-term renewal contracts with the 16 entities were executed in 2005. Four entities have an outstanding repayment obligation for a distribution system.
Canals	There is one contract in this unit. The Colusa Drain Mutual Water Company entered into a long-term renewal contract for a replacement water
Colusa Drain	supply in 2005.

Central Valley Project (Continued)	
Sacramento River Settlement	There are 133 long-term settlement contracts with individuals/entities in this unit that have been renewed. Twelve settlement contractors declined to enter into renewal contracts and one contractor requested to delay contract renewal pending settlement of an estate.
San Felipe Division	There are two water service contracts with entities in this unit. These contracts which do not expire until 2027 were amended in 2007 consistent with CVPIA. Negotiations for long-term renewal contracts are complete and awaiting final acceptance of the biological opinion for the Operations Plan and Criteria for the CVP.
Shasta Division	There are six water service contracts with entities in this unit. Long-term renewal water service contracts with these six entities were executed in 2005.
Trinity River Division	There are four water service contracts with entities in this unit. Long-term renewal contracts with these four entities were executed in 2005. One entity has an outstanding repayment obligation for a distribution system.
West San Joaquin Division	
Delta-Mendota Canal	There are three water service contracts with entities (Pacheco WD, Panoche WD, and San Luis WD) in this unit. Interim renewal contracts have been executed with Panoche WD and San Luis WD. Long-term renewal contracts with these two entities have been negotiated and are awaiting execution pending final acceptance of the Biological Opinion for the Operations Plan and Criteria for the CVP. Pacheco WD's existing long-term water service contract does not expire until February 29, 2024.
San Luis Unit	There are eight water service contracts with entities in this unit. Interim renewal contracts with these entities have been executed. Long-term renewal contracts have been negotiated and the public review and comment process has been completed. The long-term renewal contracts cannot be executed until final acceptance of the Biological Opinion prepared for the Operations Plan and Criteria for the CVP. Additionally, two of the entities have an outstanding repayment obligation for a distribution system.

Colorado River Basin Salinity Control Project - Title I

The repayment contract with the Coachella Valley Water District for lining of the Coachella Canal was executed March 14, 1978, and validated June 30, 1978. The cost of the Desalting Complex is non-reimbursable. Amendments to the San Luis Rey Indian Water Rights Settlement Act changed the provisions of the Coachella Valley Water District Contract from reimbursable to non-reimbursable.

Lewis and Clark Rural Water System

A Cooperative Agreement was signed June 29, 2001, with the Lewis and Clark Rural Water System Incorporated; no repayment is required.

Mni Wiconi Project

No repayment contracts are anticipated. Cooperative Agreements providing for work and commitment of non-Federal funds were executed prior to construction.

Navajo-Gallup Water Supply Project

The Navajo-Gallup Water Supply Project was authorized for construction by the Omnibus Public Land Management Act of 2009, Title X Part III (Public Law 111-11 on March 30, 2009) as a major component of the Navajo Nation San Juan River Basin Water Rights Settlement in New Mexico. Section 10604 of Public Law 111-11 requires execution of certain contracts preceding construction. Required contracts include; two repayment contracts, one with the City of Gallup and one with the Jicarilla Apache Nation, and a water delivery subcontract (water service agreement) among the City of Gallup and either the Navajo Nation or the Jicarilla Apache Nation. The repayment obligations of the repayment contracts shall be at least 25 percent of the construction costs of the Project that are allocable to the paying entity, but shall not exceed 35 percent. The repayment obligation is determined by an ability to pay analysis. The ability to pay analysis has determined that both the City of Gallup and the Jicarilla Apache Nation have the ability to pay 35 percent. The City of Gallup repayment contract was executed on January 10, 2012. The Jicarilla Apache Nation repayment contract was executed on April 12, 2012. The water service agreement required by Section 10604(b)(7) was executed on November 22, 2011. This water service agreement will make 7,500 acre feet per year of the Jicarilla Apache Nation's San Juan stream system water available to the City of Gallup. This water service agreement shall terminate forty (40) years from the first date of water delivery to the City of Gallup.

Pick-Sloan Missouri Basin Project Garrison Diversion Unit

Execution of the master contract with Garrison Diversion Conservancy District and three-way contracts between Reclamation, Conservancy District, and Irrigation Districts, containing approximately 113,000 acres of irrigable land, was completed March 16, 1966. Court validation was completed July 26, 1966, and confirmed August 10, 1966. Renegotiation to conform to the reformulation legislation must occur prior to construction activity in irrigation areas. A Cooperative Agreement for municipal, rural, and industrial water was executed November 19, 1986. A Grant Agreement for North Dakota Wetlands Trust was executed on December 18, 1986. A supplementary agreement for the State cost-share was executed on February 14, 1991, as required by the 1986 Garrison Diversion Unit Reformulation Act. A renegotiated repayment contract with Garrison Diversion Conservancy District has not been completed. Renegotiation of a repayment contract is being deferred pending the outcome of the Red River Valley Water Supply Study, Final Environmental Impact Statement/ROD, and authorization of the preferred alternative by Congress, which was directed by the Dakota Water Resources Act of 2000. A new 5-year Cooperative Agreement with Garrison Diversion Conservancy District for operation and maintenance of existing GDU facilities was executed on September 7, 2011. A new 5-year Cooperative Agreement with Garrison Diversion Conservancy District for municipal, rural, and industrial water was executed in September of 2012. A long-term, 40-year water service contract and project use power contract with Garrison Diversion Conservancy District for the Turtle Lake and McClusky Canal irrigation areas, was executed in April of 2012.

Southern Arizona Water Rights Settlement Act Project	Repayment is non-reimbursable under Section 309(g)(7) of the Southern Arizona Water Rights Settlement Act as amended in Title III of the Arizona Water Settlements Act.