

BUDGET The United States Department of the Interior JUSTIFICATIONS

and Performance Information Fiscal Year 2020

BUREAU OF RECLAMATION

NOTICE: These budget justifications are prepared For the Energy and Water Development Appropriations Subcommittees. Approval for release of the justifications prior to their printing in the public record of the Subcommittee hearings may be obtained through the Office of Budget of the Department of the Interior.



GENERAL STATEMENT	Page
General Statement	GS-01
Budget Authority, FY 2018 – FY 2020 Table	GS-15
Department of the Interior Unified Regions Map	GS-16
Organizational Structure Chart	GS-18
Reclamation Chart by Appropriations and Program Activities	GS-19
WATER AND RELATED RESOURCES	
Water and Related Resources Table of Contents	W&RR-01
Water and Related Resources Appropriation - Overview	
Summary of Request by Project Table	
Project Regional Crosswalk Table	
Aamodt Litigation Settlement Act	W&RR-21
Ak Chin Indian Water Rights Settlement Act Project	
Animas-La Plata Project, Colorado River Storage Participating Project	
Arbuckle	
Balmorhea Project	W&RR-31
Blackfeet Water Rights Settlement	
Boise Area Projects	
Cachuma Project	W&RR-40
Canadian River Project	
Carlsbad Project	
Central Valley Project (CVP):	
American River Division, Folsom Dam Unit/Mormon Island (Safety of Dams)	W&RR-47
Auburn - Folsom South Unit	
Delta Division	W&RR-52
East Side Division	W&RR-56
Friant Division	
Miscellaneous Project Programs	
Replacements, Additions, and Extraordinary Maintenance Program	
Sacramento River Division	
San Felipe Division	W&RR-70
Shasta Division	W&RR-72
Trinity River Division	W&RR-75
Water and Power Operations	
West San Joaquin Division, San Luis Unit	
Collbran Project	W&RR-88
Colorado-Big Thompson Project	W&RR-90
Colorado River Compliance Activities	
Colorado River Basin Project - Central Arizona Project	W&RR-96
Colorado River Basin Salinity Control Project - Title I	W&RR-105
Colorado River Front Work and Levee System	
Colorado River Basin Salinity Control Program, Title II – Basinwide Program	
Colorado River Storage Project, Section 5, Participating Projects	W&RR-114
Bonneville Unit, Central Utah Project	
Bostwick Park Project	W&RR116
Colorado River Storage Project (Initial Units)	W&RR-116
Dallas Creek Project	W&RR-116

Dolores Project	W&RR-116
Eden Project	W&RR-117
Emery County Project	W&RR-117
Florida Project	W&RR-117
Hammond Project	W&RR-118
Jensen Unit, Central Utah Project	W&RR-118
Lyman Project	W&RR-118
Navajo Unit	W&RR-118
Paonia Project	W&RR-119
San Juan-Chama Project	W&RR-119
Seedskadee Project	W&RR-120
Silt Project	W&RR-120
Smith Fork Project	W&RR-120
Vernal Unit, Utah Project	W&RR-120
Colorado River Storage Project, Section 8, Recreational and Fish and Wildlife Facilities	W&RR-122
Glen Canyon Unit	W&RR-123
Navajo Unit	W&RR-123
Wayne N. Aspinall Storage Unit	W&RR-124
Colorado River Water Quality Improvement Program	W&RR-125
Columbia and Snake River Salmon Recovery Project Federal Columbia River Power	
System (FCRPS) ESA Implementation	W&RR-128
Columbia Basin Project	W&RR-132
Crooked River Project	W&RR-137
Crow Tribe Water Rights Settlement Act of 2010	W&RR-140
Deschutes Project	W&RR-143
Eastern Oregon Projects	W&RR-146
Endangered Species Recovery Implementation Program (Platte River Recovery	
Implementation Program)	W&RR-149
Endangered Species Recovery Implementation Program (Upper Colorado and	
San Juan River Basins Endangered Fish Recovery Programs)	W&RR-153
	W10 DD 156
Fort Peck Reservation/Dry Prairie Rural Water System	
Fruitgrowers Dam Project	
Fryingpan-Arkansas Project	W&RR-160
Grand Valley Unit, CRBSCP, Title II	W&RR-163
Hungry Horse Project	
Huntley Project	
Hyrum Project	W&RR-171
Kendrick Project	W&RR-173
Klamath Project	
Islandan I 10 joot	11 WIXIX-1 / U
Lahontan Basin Project (Humboldt, Newlands, and Washoe Projects)	W&RR-181
Lake Mead/Las Vegas Wash Program	
Lake Tahoe Regional Development Program	
Leadville/Arkansas River Recovery Project	
Lewis and Clark Rural Water System	
- J	

Lewiston Orchards Project	W&RR-193
Lower Colorado River Operations Program	W&RR-196
Lower Rio Grande Water Conservation Project	W&RR-202
Lower Yellowstone Project	W&RR-204
Mancos Project	W&RR-206
McGee Creek Project	
Mid-Dakota Rural Water Project	
Middle Rio Grande Project	
Milk River Project	
Minidoka Area Projects	
Mirage Flats Project	
Mni Wiconi Project	
Moon Lake Project	
Mountain Park Project	
Novois Callyn Water Symply Designt/Calanada Divar Stonesa Doutisinating Designt	Wⅅ 220
Navajo-Gallup Water Supply Project/Colorado River Storage Participating Project	
Newton Project	
Norman Project	
North Platte Project	
Nueces River Project	W&RR-240
Ogden River Project	W&RR-242
Orland Project	W&RR-244
Paradox Valley Unit, CRBSCP, Title II	W&RR-246
Parker-Davis Project	
Pick-Sloan Missouri Basin Program:	
Ainsworth Unit	W&RR-251
Almena Unit	
Angostura Unit	
Armel Unit	
Belle Fourche Unit	
Bostwick Unit	
Boysen Unit	
Buffalo Bill Dam Modification	
Canyon Ferry Unit	
Cedar Bluff Unit	
Dickinson Unit	
East Bench Unit	
Frenchman-Cambridge Unit	
Garrison Diversion Unit	
Glen Elder Unit	
Heart Butte Unit	
Helena Valley Unit	
Kansas River Area	
Keyhole Unit	
Kirwin Unit	
Lower Marias Unit	
Missouri Basin O&M	
Narrows Unit	W&RR-298

North Loup Unit	W&RR-299
North Platte Area	W&RR-302
Oahe Unit	W&RR-305
Owl Creek Unit	W&RR-307
Rapid Valley Unit	W&RR-309
Riverton Unit	W&RR-310
Shadehill Unit	W&RR-312
Webster Unit	W&RR-314
Yellowtail Unit	W&RR-316
Pine River Project	W&RR-318
Preston Bench Project	W&RR-320
Provo River Project	W&RR-322
Rapid Valley Project	W&RR-324
Rio Grande Project	W&RR-326
Rio Grande Pueblos Project	W&RR-329
Rocky Boy's/North Central Montana Rural Water System	W&RR-330
Rogue River Basin Project, Talent Division	W&RR-332
Salt River Project	W&RR-336
Salton Sea Research Project	W&RR-338
San Angelo Project	W&RR-342
San Carlos Apache Tribe Water Settlement Act Project	W&RR-344
San Luis Valley Project	W&RR-346
Sanpete Project	W&RR-348
Scofield Project	W&RR-349
Shoshone Project	W&RR-351
Solano Project	W&RR-353
Southern Arizona Water Rights Settlement Act Project	W&RR-355
Strawberry Valley Project	W&RR-357
Sun River Project	W&RR-359
Tualatin Project	W&RR-361
Tucumcari Project	W&RR-364
Umatilla Project	W&RR-366
Uncompangre Project	
United States / Mexico Border Issues – Technical Support	
Upper Colorado River Operations Program	W&RR-372
Ventura River Project	W&RR-374
W.C. Austin Project	W&RR-376
Washington Area Projects	
Washita Basin Project	
Weber Basin Project	
Weber River Project	
Wichita Project (Cheney Division)	
Yakima Project	W&RR-389
Yakima River Basin Water Enhancement Project	

Yuma Area Projects	W&RR-399
Water and Related Resources Bureauwide Programs	
Table of Contents	BW-01
Budget Summary Table	BW-02
Overview	
Dam Safety Program	BW-08
Safety Evaluation of Existing Dams	
Initiate Safety of Dams Corrective Action	BW-08
Department of the Interior Dam Safety Program	
Emergency Planning and Disaster Response Program	BW-15
Endangered Species Recovery Implementation Program (Bureauwide)	
Environmental Program Administration	
Examination of Existing Structures	
General Planning Activities	BW-25
Land Resources Management Program	BW-27
Miscellaneous Flood Control Operations	BW-33
Native American Affairs Program	BW-35
Negotiation and Administration of Water Marketing	BW-38
Operations and Program Management	BW-40
Power Program Services	BW-42
Public Access and Safety Program	
Reclamation Law Administration	
Recreation and Fish and Wildlife Program Administration	
Research and Development, Desalination and Water Purification Program	
Research and Development, Science and Technology Program	BW-54
Site Security	BW-58
WaterSMART Program	BW-62
Central Valley Project Restoration Fund	
Summary Table	
Central Valley Project Restoration Fund	Restoration Fund-02
California Bay-Delta Restoration Fund	
Summary Table	
California Bay-Delta	Bay Delta-02
Loan Program	
Budget Summary Table	_
Overview	Loan Program-02

Policy and Administration	
Office of the Commissioner	P&A-01
Regional Offices	P&A-02
Working Capital Fund	WCF-01
Permanent Appropriations	
Summary Page	
Colorado River Dam Fund, Boulder Canyon Project	
Miscellaneous Permanent Appropriations	
Reclamation Water Settlements Fund	
San Joaquin River Restoration Fund.	Permanents-07
Revenue Financed Programs	
Revenue Financed Programs	
Lower Colorado River Basin Development Fund, Central Arizona Proje	ectRevenues-02
Lower Colorado River Basin Development Fund, Arizona Water Settle	ments Act Revenues-04
Upper Colorado River Basin Fund, Colorado River Storage Project, Re	venuesRevenues-07
Appropriation Language	
Appropriation Language for FY 2020	Appropriations Language-01
Explanation of Changes in Appropriation Language for FY 2020	
Appendix	
Appendix Table of Contents	Appendix-01
Benefit Cost Ratios as of October 2020	Appendix-02
Land Certification	Appendix-04
Obligations by Function for Operating Projects	
Pacific Northwest Region	Annendix-06
Mid-Pacific Region	* *
Lower Colorado Region	
Upper Colorado Region	
Great Plains Region	* *
Project Repayment FY 2020	Appendix-17
Reclamation Construction Program	Appendix-23
Repayment of Irrigation Investment	Appendix-24
Status of NEPA Compliance	Appendix-27
Status of Water Service and Repayment Contracts	Appendix-47

GENERAL STATEMENT BUREAU OF RECLAMATION BUDGET ESTIMATES - FY 2020

Introduction

The Bureau of Reclamation's fiscal year (FY) 2020 budget provides the foundation for Reclamation's efforts to manage, develop, and protect water and related resources, consistent with applicable State and Federal law, in a cost-effective and environmentally responsible manner in the interest of the American public. It also supports the Administration's and Department of the Interior's (Department) goals of ensuring the efficient generation of energy to meet our economic needs; provision of secure water supplies for irrigation, people, and the environment; enhancing outdoor recreation opportunities; and fulfilling our commitments to tribal nations. To be successful in achieving these results, Reclamation will continue to work with a wide range of stakeholders, including water and power customers, Tribes, state and local officials, conservation organizations, and others.

Reclamation is requesting a gross total of \$1,109,849,000 in Federal appropriations, which is anticipated to be augmented by over \$1 billion in other Federal and non-Federal funds for FY 2020. Of the total, \$962,000,000 is for the Water and Related Resources account, which is Reclamation's largest account, \$60,000,000 is for the Policy and Administration account, and \$33,000,000 is for the California Bay Delta account. A total of \$54,849,000 is budgeted for the Central Valley Project Restoration Fund, to be offset by expected discretionary receipts in the same amount.

This budget is focused on meeting the Department's priorities, including economic prosperity in the West, and ensuring the Nation's natural resources we steward are used for multiple purposes. Working with States, Tribes, customers, and local entities, Reclamation will focus on maintaining secure and reliable water supplies and power generation by enhancing reliability, fulfilling Indian water rights obligations, and meeting our environmental responsibilities. Reclamation plans to focus on opportunities to increase water supply reliability by attention to local water conflicts, investments to modernizing existing infrastructure, and support for water development benefiting Native Americans in order to meet Reclamation's core mission goals. We will continue to seek to optimize non-Federal contributions to accomplish more with limited Federal dollars.

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. The FY 2020 budget continues funding to keep implementation of water settlements on track for completion, consistent with statutory schedules. The FY 2020 budget includes funding to support the Blackfeet Water Rights Settlement, which, by statute, requires full funding by the enforcement date of January 21, 2025. The FY 2020 budget also includes funding for the Navajo-Gallup Water Supply Project as part of the Navajo-San Juan settlement. In addition, the FY 2020 budget includes funding for the Aamodt Litigation, Crow, Ak-Chin, San Carlos Apache, Colorado Ute, and Nez Perce settlements.

Reclamation's mission is to manage, develop, and protect water and related resources in an economically and environmentally sound manner in the interest of the American public. Along with the primary functions of water and hydropower, Reclamation has had three initiatives of considerable focus in the past year—the Drought Contingency Plans (DCPs) that are in development for the Colorado River basin; water supplies and power generation in California; and managing the effects of continued drought.

The latest hydrology information in the Colorado River Basin is sobering. After experiencing the fourth driest year on record last year, the combined storage of lakes Powell and Mead sit today at 46 percent. That is the lowest level since 1966 when Lake Powell was initially filling and cutting off water supplies below Glen Canyon Dam. These lakes are on the brink of a shortage today. There is real risk of rapid declines in reservoir elevations, particularly at Lake Mead, in the very near future. With the current Powell inflow forecast at just 66 percent of average, Lake Mead is projected to decline to below elevation 1050 in 2020, a lower level than at any time since Lake Mead first filled

There is a profound need for drought contingency plans to reduce the risk facing the basin from the drought that has affected it for over 19 years, resulting in unacceptable risk of crisis and conflict. Reclamation has made substantial progress toward comprehensive DCPs with the basin states and water districts of the Colorado River Basin. Efforts continue on DCPs, with one final state of the seven working to codify DCP agreements. Toward the same end, the Ten Tribes Partnership and Reclamation collaboratively developed and released the Colorado River Basin Ten Tribes Partnership's Tribal Waters Study. The Tribes, located in areas from the headwaters of the Colorado and Green rivers to the border of Mexico, have diversion rights and claims to nearly 2.8 million-acre feet.

Reclamation has explored and developed various options to remedy water shortfalls in California. These options look to address potential inequities between groups of water and power customers, geographic conflicts, municipal versus agrarian users, and others. Reclamation partners with the State of California in the planning stages for California WaterFix, which was proposed to address the issues of the water system infrastructure in California being "unreliable and outdated." The proposal also prepares for possible threats to the water system such as climate variability and seismic activity.

Reclamation faces pressures which have altered the need for Reclamation water, including population increases and drought, unpredictable storms, and preventable runoff. The investments described in Reclamation's FY 2020 budget, in combination with prior year's efforts will ensure that Reclamation can continue to provide reliable water and power to the American West.

Reclamation's dams and reservoirs, water conveyance systems, and power generating facilities are integral components of the Nation's infrastructure. Effectively managing the benefits provided by these structures are among the many significant challenges that Reclamation faces over the next five years and beyond. Proper management of the benefits provided by Reclamation infrastructure is critical to Reclamation's ability to achieve progress on its mission objectives. Changing demographics and competing demands are increasingly impacting already strained systems. Reclamation's water and power projects and activities throughout the western United States are essential for providing water supplies for agricultural, municipal and industrial purposes. Reclamation's projects also provide energy produced by hydropower facilities and maintain ecosystems that support fish and wildlife, hunting and recreation, as well as rural economies.

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. Water management, improving and modernizing infrastructure, using sound science to support critical decision-making, finding opportunities to expand capacity, reducing conflict, and meeting environmental responsibilities were all addressed in the formulation of the FY 2020 budget. Reclamation continues to look at ways to plan more efficiently for 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 nation and the second largest producer of hydroelectric power, Reclamation's projects and programs are foundational to driving and maintaining economic growth in hundreds of watershed basins throughout the United States. Reclamation manages water for agricultural,

municipal and industrial use, and provides flood control and recreation for millions of people. Reclamation's activities, including recreation benefits, support economic activity valued at \$62.6 billion, and support approximately 458,000 jobs. Reclamation provides water for irrigation of 10 million acres, which yields approximately 25 percent of the nation's fruit and nut crops, and 60 percent of the vegetable harvest.²

Reclamation owns 76 power plants and operates 53 hydroelectric power plants that account for 15 percent of the hydroelectric capacity and generation in the United States. Reclamation generates about 40 billion kilowatt hours of electricity annually— enough to meet the annual needs of over 3.8 million households. Reclamation collects over \$1.0 billion in gross power revenues for the Federal government each year.

Reclamation is continuing its efforts to strengthen its decision-making in various program areas. This includes the WaterSMART program, science and technology, and the improved planning of future Indian water rights settlements. Reclamation's efforts aim to demonstrate effectiveness, efficiency, and innovation in Reclamation programs.

Government Reform

President Trump signed an Executive Order to modernize and reform the executive branch and Interior is leading the way, developing and executing a program that will streamline processes and better serve the American people. The absolute first step in building a better and more efficient executive branch though is fostering a culture of ethics and respect amongst colleagues.

Interior has launched several top management objectives to better achieve Departmental goals and lead the agency moving forward. From day one of this Administration, Interior's leadership has made the work environment a priority. There is zero tolerance for any type of workplace harassment at Interior. The Department is instilling a culture change through clear management accountability, swift personnel actions, reporting procedures for harassment conduct, improved training, and substantive action plans.

In the area of anti-harassment efforts, each bureau and office has made significant headway in putting a diverse set of measures in place to prevent and address unacceptable conduct. Interior has also launched an internal Workplace Culture Transformation Advisory Council to include leadership from across the Department to keep a focus on Interior's commitment to the workplace environment. The Council will look at common issues raised in the Federal Employee Viewpoint Survey, ways to improve employee engagement, and building career paths which cross bureau silos; all with the goal to transform Interior's workplace culture for our employees, so they can realize their individual potential and be their most productive selves for the American people.

Another management priority is creating a strong ethical culture to ensure Interior employees honor the public's trust to manage taxpayer funds responsibly and avoid conflicts of interest. The expectations for appropriate employee conduct have been made clear. The Department has set goals and expectations for qualified ethics officials within Interior sufficient to ensure our operations are conducted ethically and ensure all employees have access to prompt, accurate ethics advice.

¹According to the Department of the Interior's Economic Report FY 2017.

²As published on the Bureau of Reclamation Fact Sheet (www.usbr.gov/main/about/fact.html).

Interior Priorities

Presidential Memorandum -- Water in the West

On October 19, 2018, President Trump signed the "Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in the West", which directs the Secretary of the Interior and the Secretary of Commerce to "work together to minimize unnecessary regulatory burdens and foster more efficient decision-making so that water projects are better able to meet the demands of their authorized purposes." To address water infrastructure challenges in the western United States, it instructs both Secretaries to "Streamlin[e] Western Water Infrastructure Regulatory Processes and Remov[e] Unnecessary Burdens". In response, Interior designated one lead official to coordinate the agencies' ESA compliance response in the Central Valley and Klamath basins, to date, and is prioritizing other activities in support of this significant direction.

Modernize our infrastructure

Reclamation's dams, water conveyance systems, 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 modernization of our infrastructure and the benefits that these structures provide is among the significant challenges facing Reclamation that will extend over the next several years. Reclamation manages 492 dams throughout the 17 Western States. Reclamation's Dam Safety Program has identified 363 high and significant hazard dams. 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 adoption of 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 2020 budget request includes \$92.8 million for the Dam Safety Program.

The proposed budget also includes appropriations for specific projects for Extraordinary Maintenance (XM) 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 XM 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 XM items are directly funded by revenues, customers, or other Federal agencies (e.g., Bonneville Power Administration). The FY 2020 budget includes \$114.1 million for XM related activity.

Reclamation and its partners face pressures, such as population increases and drought, which have increased the need for Reclamation and partner products and assets, including land, water and power. New construction is sometimes warranted to meet these changing needs to ensure the most efficient delivery of Reclamation objectives and project benefits. In FY 2020, the proposed budget includes construction funding for multiple efforts, including rural water initiatives, the Cle Elum Fish Passage within the Yakima River Basin Enhancement Project, and the Mendota Pool Bypass of the San Joaquin River Restoration Program, among others.

Finally, invasive species represent a growing threat to Reclamation infrastructure. For example, the spread of invasive mussels has become a major concern; Quagga and Zebra mussels have continued to spread throughout the West, infesting Reclamation dams, power plants, and facilities of other water providers. The Columbia Basin is the last major uninfected watershed in the United States, where regional estimates suggest a full-blown infestation would cost its citizens \$500 million annually in lost economic production, higher electric rates, and risk more endangered species complications. As a result, Reclamation's FY 2020 budget includes over \$8 million to combat and prevent the spread of invasive species throughout Reclamation facilities and structures, including \$5.1 million directed towards the prevention, early detection and monitoring, containment and control of Quagga and Zebra mussels at existing facilities.

Create a Conservation Stewardship Legacy

Conserving Our Land and Water is both a mission and a critical goal of the Department; managing, protecting, enhancing, and conserving water are Reclamation's contributions toward that goal. Reclamation plays a key role in ensuring reliable, secure water supplies. 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 developing strategies to help ensure water supplies for future generations. The funding proposed in Reclamation's FY 2020 budget supports Reclamation's collaboration with non-Federal partners in efforts to address emerging water demands and water shortage issues in the West. The FY 2020 budget will support Reclamation's efforts to promote improved water management and conservation, and to take actions to mitigate adverse environmental impacts of Reclamation projects.

Virtually all of Reclamation's programs and projects address water conservation in some fashion. Operations and maintenance of facilities enables delivery of project benefits, to include water supply, conservation, and storage. Resource management efforts, including land acquisition, drought response planning, water management administration/oversight, and research and development activities all ensure that Reclamation utilizes the most efficient processes, strategic planning, and technology available to the Federal government. Reclamation's water conservation grants and Water Reclamation and Reuse Program support the reliability of the Nation's water supply by leveraging Federal and non-Federal funding to conserve hundreds of thousands of acre-feet of water each year in urban and rural settings, on both large and small scales. Through programs such as the Drought Response Program, Reclamation helps communities manage drought through on-the-ground projects in advance of a crisis, and through the development of long-term strategies through contingency and general planning.

Sustainably Develop our Energy and Natural Resources

The Department has a significant role to play in putting our nation on a better path towards energy security. Through early planning, strategic investments, and the application of sound science, the Department is working to ensure that hydropower remains an integral part of the Nation's energy development strategy. Reclamation's FY 2020 budget request includes \$1.03 million to support Department domestic energy security initiatives – facilitating the development of untapped hydropower potential on Federal water resource projects through collaborative regulatory reform, technological and operational innovation, and stakeholder outreach. These activities allow Reclamation to derive additional value and revenue from existing public infrastructure – reducing project operating costs (e.g., water and power delivery costs). Revenues derived from incremental hydropower production are invested in the underlying Federal infrastructure to ensure continued, reliable operations and benefits.

Requested funding supports continued implementation of Department domestic energy security initiatives, increasing Reclamation project hydropower capabilities and value. These activities include: policy development, oversight, and support services facilitating non-Federal hydropower development on Reclamation projects through Lease of Power Privilege and Federal Energy Regulatory Commission (FERC) licensing; support of Reclamation automated data collection and archiving systems designed to achieve operational efficiencies and reduce power program costs, enabling Reclamation to perform fleet-

wide data analytics to anticipate failures, increase unit reliability, and pursue predictive maintenance strategies supporting long-term asset management; support of Reclamation's Hydropower Efficiency Research Systems work, designed to achieve operational efficiencies at Reclamation hydropower facilities; information sharing, coordination, and strategic planning with Federal partners and industry; implementation of power rate reduction strategies (e.g., achieving supply and demand-side efficiencies and ensuring appropriate cost allocations, rating setting, and repayment) to maximize the value of Reclamation hydropower to our customers. Funding will also support Tribes in the development of untapped energy potential to better manage water resources. These activities will be pursued in coordination with Hydropower Memorandum of Understanding (MOU) partners, the Department of Energy and US Army Corps of Engineers. (See Power Program Services section for more detail.)

Ensure Tribal Sovereignty Means Something

Reclamation provides services through many of its projects and programs to fulfill our trust responsibilities to Tribes. The FY 2020 budget request includes a total of \$132.9 million for Indian water rights settlements. This includes funding of \$69.2 million for the Navajo-Gallup Water Supply Project, \$12.8 million for the Crow Tribe Water Rights Settlement, \$8.3 million for the Aamodt Litigation Settlement, and \$10.0 million for the Blackfeet Water Rights Settlement. In addition to requesting discretionary funding, these settlements will draw on available mandatory funding to support current settlement implementation activities. Other settlements include the Nez Perce Settlement within the Columbia and Snake River Salmon Recovery Project (\$5.6 million), the San Carlos Apache Tribe Water Settlement Act (\$1.6 million), the Ak-Chin Indian Water Rights Settlement Act (\$15.3 million), and the Colorado Ute Settlement Act within the Animas La Plata Project (\$10.2 million).

The FY 2020 budget also includes \$11.7 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. Finally, funding also supports Reclamation efforts for Tribal nations by supporting many activities across the Bureau, including rural water projects, the Yakima River Basin Water Enhancement Project, the Klamath Project, and the Lahontan Basin project, among others.

Restore Trust and Be a Good Neighbor

Reclamation has shifted from development of single-purpose agricultural projects toward a multipurpose approach to water resource development that includes recreation. Today, Reclamation plays a major role in meeting the increasing public demand for water-based outdoor recreation facilities and opportunities.

The recreation areas developed as a result of Reclamation water projects are among the Nation's most popular for water-based outdoor recreation. Reclamation projects include approximately 7.8 million acres of land and water and 289 recreation and wildlife areas (42 of which are directly managed by Reclamation), 550 campgrounds and over 1,300 miles of hiking trails available to the public resulting in approximately 34 million visits annually. This includes 12 designated National Recreation Areas that are managed by either the National Park Service or United States Forest Service.

Reclamation's land and water-based outdoor recreation opportunities often include opportunities such as camping, hiking, boating, special recreation and youth programs, hunting, fishing, photography, wildlife viewing, and natural and cultural resources as well as provide unique educational and interpretive opportunities. Reclamation projects have also created national wildlife refuges and state wildlife management areas that offer valuable fish and wildlife habitat along with hunting and fishing

opportunities. In addition, Reclamation projects have also created a variety of recreation opportunities on the rivers downstream from the dams, including world class whitewater rafting and fishing opportunities.

Reclamation's Recreation Fee program supports this effort. Section 133 of the Federal Lands Recreation and Enhancement Act extends the authorization for these fees to September 30, 2020. Reclamation estimates it will collect \$569,000 in recreation fees in FY 2020 under this authority and will use them to enhance the visitor experience at Interior facilities.

Reclamation has built long standing, mutually beneficial partnerships with other public entities to keep such opportunities available to the public. Through non-Federal partnership, Reclamation assists local communities in attracting recreation-related investments and involves local citizens in the decision-making process. Over 178 recreation areas are managed through public partnership arrangements to meet public needs and expectations.

Protecting Our People and the Border

In support of the Department's mission to place a high priority on safety, security, and preparedness, and to uphold its responsibilities for protecting lives, resources, and property through such programs as law enforcement, health and safety, security, and emergency management, Reclamation performs a variety of emergency preparedness and Continuity of Operations (COOP) exercises and activities. Reclamation has also developed a law enforcement staffing model for our large inventory of dams, which includes five National Critical Infrastructure (NCI) facilities.

To remain prepared, Reclamation's Emergency Action Plans are reviewed annually and periodically exercised at Reclamation's high- and significant-risk dams. Development and revision of policies and guidance for COOP activities ensure that Reclamation continues to carry out Mission Essential Functions and Essential Support Activities and returns to normal business operations after an impacting event.

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. To remain vigilant and to protect our critical assets, facilities and systems, critical information, and most importantly, the employees, contractors, and public at or near Reclamation facilities, Reclamation has developed a law enforcement staffing model (model). The model determines the security guard capabilities and staffing levels that are needed to protect Reclamation's critical assets. The model determines staffing needs based on a dam's current missions and objectives, security risks, and public safety needs. The FY 2020 budget supports protection of our nation's critical infrastructure with a request for \$36.4 million for Site Security.

Strike a regulatory balance

Consistent with Departmental priorities, and in coordination with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service, Reclamation works to effectively integrate and – where practical – balance the full and appropriate range of conservation-related considerations for Reclamation projects. Maintaining compliance with such efforts ensures Reclamation can achieve its other goals and priorities in the most efficient manner possible. Funding ensures Reclamation meets all of its obligations to avoid potential litigation and other issues while also ensuring that decisions are based on sound science and thorough analysis. In FY 2020, such efforts include the Multi-Species Conservation Program within the Lower Colorado River Operations Program and the Platte River Recovery Implementation Program.

Achieve our goals and lead our team forward

Lean in the East—A Presence in the West: Reclamation has a very limited footprint in its headquarters office in Washington, D.C. Less than one percent of its 5,280 employees are located in the Washington, DC office. Along with the Denver office, which includes certain centralized functions and the Technical

Service Center, the other 99 percent of employees serve Reclamation stakeholders in regions and area offices in the 17 Western States. Reclamation is a prime example of providing services "on the ground" where they are needed.

The *President's Management Agenda* set goals in areas that are critical to improving the Federal Government's effectiveness, efficiency, cybersecurity, and accountability. As a result, Reclamation will be able to say the following by 2020:

- 1. Reclamation is managing programs and delivering critical services more effectively.
- 2. Reclamation is devoting a greater percentage of taxpayer dollars to mission achievement rather than costly, unproductive compliance activities.
- 3. Reclamation is more effective and efficient in supporting program outcomes.
- 4. Reclamation is accountable for improving performance.

Title Transfer Legislative Proposal: Reclamation supported a legislative proposal to facilitate the transfer of title of certain Reclamation projects and facilities when such transfers are beneficial. Substantively similar legislation was recently enacted. While Reclamation has engaged in efforts related to title transfer in the past on a case-by-case basis, this newly enacted authority will go further to facilitate greater local control of water infrastructure. The goal of this initiative is to allow local water managers to make more water management decisions at the local level, while allowing Reclamation to focus its management efforts on those projects with a greater Federal nexus. As part of this effort, Reclamation will engage with water users and all stakeholders to identify projects and facilities that may be potential candidates for such a transfer.

Partner Funding: Reclamation's funding is comprised of Federal appropriations, customer-funded dollars including those from both other Federal and non-Federal stakeholders, and offsetting collections. Many construction projects require significant upfront cost sharing and much of the hydropower program is funded by power customers or the Department of Energy's Power Marketing Administrations (PMAs). Grants under the WaterSMART program, for example, require a minimum 50/50 cost share.

Cybersecurity and FITARA: Reclamation is implementing information technology initiatives designed to enhance safety and security. Reclamation is evaluating, upgrading, and in some cases replacing the computerized systems that manage our facilities to protect the infrastructures themselves, as well as the people who live downstream. In addition, Reclamation is implementing the Federal Information Technology Acquisition Reform Act (FITARA), whose stated purpose is to increase the government's return on investment on the technology budget, pushing for data center consolidation and strategic sourcing initiatives.

Data Modernization: Reclamation continues to support the Open Water Data Initiative (OWDI) which includes the objectives of making Reclamation's water and related data better managed, more easily found, and more easily shared with the private sector, other agencies, and the general public.

Central Valley Project Restoration Fund: The Central Valley Project Restoration Fund account request is adjusted from the previously anticipated 3-year rolling average amount by about \$2 million, reflecting an administrative decision to "reset" the three-year rolling average to stabilize the year-to-year variability in discretionary requests.

Department Wide Reorganization Plan

Over many decades, the Department of the Interior experienced new bureaus becoming established on an *ad hoc* basis with their own unique regional organizations. This ultimately resulted in a complicated series of 49 regional boundaries among 8 bureaus. This complexity led to the situation where bureau regional

leadership was often focused on different geographic areas, did not have adequate and shared understanding of the needs and perspectives of regional stakeholders, and opportunities to share administrative capacity across bureaus were difficult to recognize and implement. Further, members of the public were often frustrated by problems in inter-bureau decision making where uncoordinated timelines and processes could lead to unnecessarily long delays in reaching a decision. The Department's reorganization is focused on making improvements across each of these areas.

The 2020 budget request for Reclamation includes \$2.3 million to support the reorganization of the Department of the Interior. On August 22, 2018, after working closely with stakeholders across the country on options to consolidate Interior's 49 different regions into common regions, the Department announced the designation of Interior's 12 new unified regions. As a result of Tribal consultation, BIA, BIE, and the Office of the Special Trustee for American Indians will not realign their regional field structures.

Establishing unified regions across bureaus is the cornerstone of the reforms designed to improve Interior's service delivery to the public. Within each unified region, bureaus will focus work on the same resources and constituents and improve coordination across the Department. For the public, fewer regions make it easier to do business with Interior, particularly when the public interacts with several bureaus or jurisdictions.

Reclamation is currently assessing what headquarters functions could be delivered more effectively out West and identifying staff and functions to be moved. Interior will leverage the unified regional structure to improve and streamline business operations using shared services and best practices across the Department, focusing primarily on human resources, information technology, and acquisition services. Work is underway in 2019 to plan implementation, conduct analysis, and identify areas for collaboration within the new regions.

The 2020 request continues support for the reorganization of the Department of the Interior with funding to stand up the unified regions, and improve operations through the use of technology, shared services, and consistent practices.

- Support and participate in standing up the unified regions, including collaboration across bureaus.
- Transition internal business operations to the new regional structure.
- Implement shared service solutions to improve delivery of one or more of human resources, information technology, and acquisition services.

Account Level Details

The FY 2020 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.

The FY 2020 budget 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 Administration

- priorities. The selection of awards is, wherever possible, guided by high quality evidence-based research and performance measures.
- 3) Core Mission in Framework of Department of the Interior Priorities Performing the core management responsibilities of providing water and power in alignment with Department priorities and the goals in the Strategic Plan of 2018-2022.

The FY 2020 budget for Reclamation totals \$1.110 billion in gross budget authority. The budget is partially offset by discretionary receipts in the Central Valley Project Restoration Fund (\$54.8 million) resulting in net discretionary budget authority of \$1.055 billion.

Water and Related Resources - \$962,000,000

The FY 2020 Water and Related Resources budget provides funding for five major program activities – Water and Energy Management and Development (\$249.8 million), Land Management and Development (\$43.0 million), Fish and Wildlife Management and Development (\$141.9 million), Facility Operations (\$297.3 million), and Facility Maintenance and Rehabilitation (\$230.0 million). The funding proposed in Reclamation's FY 2020 budget supports key programs important to the Department and in line with Administration objectives.

By far, the greatest portion of Reclamation's Water and Related Resources budget is dedicated to delivering water and generating power. This is accomplished within over 300 Congressionally authorized projects, each of which has its own authorization. Certain programs are also of note, including Dam Safety—described above—and others, due to their unique nature and interest to Congress and other stakeholders.

Reclamation's efforts to support water supplies for tribal nations are long standing and include rural water projects and implementation of water rights settlement actions. Funding to support tribal nations is included within several projects; examples include:

The Ak Chin Water Rights Settlement Act Project budget of \$15.3 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 \$11.7 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 2020 budget continues the implementation of Indian water rights settlements, including the Blackfeet Indian Water Rights Settlement enacted in December 2016, two enacted in December 2010 (Crow and the Aamodt Litigation) and the 2009 authorized Navajo-Gallup Water Supply.

Additionally, the Columbia/Snake River Salmon Recovery; Animas-La Plata, San Carlos, Klamath, Trinity River Restoration Program within the Central Valley Project, Yakima River Basin Water Enhancement Project, and three of the five authorized rural water projects (discussed below) benefit tribal nations.

More generally, Reclamation's budget supports its role in implementing Indian water rights settlements; this includes \$6.0 million to improve coordination and application of expertise to analyze Indian water settlements more effectively and expediently to strengthen Department-wide capabilities in the Secretary's

Indian Water Rights Office and achieve an integrated and systematic approach to Indian water rights negotiations.

Under the Research and Development (R&D) program, Reclamation's FY 2020 budget includes opportunities for collaborative partnership with other Department bureaus to leverage resources in order to more effectively advance Reclamation's mission. The R&D programs include both Science and Technology, and Desalination and Water Purification—both of which are intended to enhance water and power deliveries and make use of symbiotic partnerships among experts in related disciplines.

The Science and Technology program supports engineering innovation that promotes economic growth, supports maintaining and improving our water and power infrastructure, and spurs continued generation of energy. Program outcomes also enable reliable water and power delivery to our customers, improve safety, limit the impacts of invasive species, and ensure that Reclamation can meet its environmental compliance responsibilities. These activities support the Administration's priorities for the FY 2020 budget, including job creation by supporting technology transfer activities that may lead to new business opportunities for private industry. The program also supports Administration priorities related to maintaining and improving our water and power infrastructure by 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. The Administration's priority related to energy from all sources is supported by hydropower research that ensures Reclamation is maximizing reliability, reducing maintenance costs, and exploring new energy development opportunities. Research on safety is ensuring our workers can perform their jobs safely and securely.

The Desalination and Water Purification program priorities include development of improved and innovative methods of desalination and reducing costs to develop new water supplies. The research and testing funded out of this program supports the Administration's priorities for the FY 2020 budget, including job creation. The funding supports innovative solutions that spur the creation of new businesses by entrepreneurs and helps advance Reclamation's competitive edge in the area of water treatment and desalination.

Reclamation's continued water delivery and power generation cannot be accomplished without meeting our environmental responsibilities. Reclamation meets these responsibilities on its individual projects, such as the Central Valley Project and the Middle Rio Grande Collaborative Program through a large number of activities. The FY 2020 budget also funds Reclamation's Endangered Species Act recovery programs and other programs that contribute towards these efforts, such as the Columbia/Snake River Salmon Recovery Program, the San Juan River Recovery Implementation Program, the Upper Colorado Recovery Implementation Program, and the Multi-Species Conservation Program within the Lower Colorado River Operations Program, among many others.

Among other efforts, Reclamation helps address the West's water challenges through the WaterSMART competitive grant program. This program helps local water stakeholders address current and future water shortages, including drought; degraded water quality; increased demands for water and energy from growing populations; environmental water requirements; and the potential for decreased water supply availability due to drought, population growth, and increased water requirements for environmental purposes.

Central Valley Project Restoration Fund (CVPRF) - \$54,849,000

This fund was established by the Central Valley Project Improvement Act, Title XXXIV of P.L. 102--575, October 30, 1992. The budget of \$54.8 million is expected to be offset fully by discretionary receipts based on what 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 FY 2020 Budget will reset the three-year rolling average to stabilize the year-to-year variability in discretionary requests. The budget of \$54.8 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 \$2.0 million in FY 2020, collected from the Friant Division water users to the San Joaquin Restoration Fund.

California Bay-Delta Restoration Fund - \$33,000,000

The CALFED Bay-Delta Restoration Act (P.L. 108-361), as amended, 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 FY 2020 budget of \$33.0 million implements priority activities pursuant to P.L. 108-361. 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 — work together to ensure that the Federal actions and investments the Administration is undertaking are coordinated in a fashion to help address California's current water supply and ecological challenges. This budget supports actions under the following program activities: \$1.7 million for Renewed Federal State Partnership, \$2.3 million for Smarter Water Supply and Use, and \$29.1 million to address the Degraded Bay Delta Ecosystem.

Policy and Administration - \$60,000,000

The \$60.0 million budget will be used to: 1) develop, evaluate, and directly implement 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.

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, Mission Support Organization, 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 into the fund. It is through the Working Capital Fund that Reclamation pays for many Departmental Centralized Services.

DOI Strategic Plan

The FY 2018-2022 DOI Strategic Plan (Plan) was developed by the Department of the Interior to establish the priorities, strategies, and goals for the Department in the current Administration. The Plan is in compliance with the principles of the Government Performance and Results Act (GPRA) Modernization Act of 2010, and 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 2020 President's Budget. Bureau and program specific plans for FY 2020 will be consistent with the goals, outcomes, and measures described in the recent framework of the FY 2018-2022 version of the DOI Strategic Plan and related implementation information in the Annual Performance Plan and Report (APP&R).

Agency Priority Performance 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 that 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 two priority goals:

• Water Conservation & Supply Enhancement

- o Impact Statement: Increase the available water supply in the Western States through conservation-related programs to ensure a more sustainable and secure water supply, reducing the impact of drought for the benefit of the public and the economy.
 - O Achievement Statement: By September 30, 2019, the Bureau of Reclamation will facilitate water conservation capacity of 53,800 acre-feet to reduce the impact of drought.

Bureau Contribution: Reclamation contributes towards the Department's goal by partnering with States, Indian Tribes, irrigation and water districts and other organizations with water or power delivery authority to implement sustainable water management strategies to expand and stretch limited water supplies resulting in water conservation. Programs contributing toward the Priority Goal include WaterSMART Grants; the Title XVI Program; the Bay-Delta Restoration Program; and the Yakima River Basin Water Enhancement Project.

Implementation Strategy: In FY 2019, programs that contribute to the Water Conservation & Supply Enhancement Priority Goal are expected to result in water savings of approximately 104,554 acre-feet. With the funding requested in FY 2020, programs that contribute toward the priority goal are expected to also result in approximately 11,415 acre-feet of water savings.

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 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.

• Improve condition of priority assets necessary for mission delivery across the Department of the Interior

- o Impact Statement: Improve the condition of the Department of the Interior's priority real property assets to the desired state suitable for public safety, stewardship, and access to our nation's treasures and resources.
- O Achievement Statement: By September 30, 2019, the Department of the Interior will improve the condition of its priority real property assets such that 82% are in the desired state of acceptable condition.

Bureau Contribution: Reclamation contributes to the Department's goal through the continued reliable performance of its water and power facilities, which is made possible through effective preventive maintenance and the commitments of Reclamation and its managing partners to significant ongoing investments in major rehabilitation and replacement (MR&R) activities. Through continued engagement with Reclamation's managing partners and through Reclamation's facility review programs, Reclamation continually monitors and assesses the condition of its real property assets to ensure they are maintained in an acceptable condition.

Implementation Strategy: Reclamation issued an Infrastructure Investment Strategy (Strategy) in 2015. Implementation of the Strategy builds on existing processes for gathering and managing information on

maintenance needs, characterizing the importance and urgency of future infrastructure investments, communicating with stakeholders through annual reporting, and working collaboratively with partners to address funding requirements. In FY 2019 and FY 2020, Reclamation will continue to implement the Strategy and improve the quality of MR&R data, including providing a categorization of relative importance for each identified activity which helps to inform decision making on infrastructure investments, ultimately improving the condition of priority real property assets.

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 to identify and address any need for enhanced coordination or policy measures to address barriers to the achievement of the priority goal.

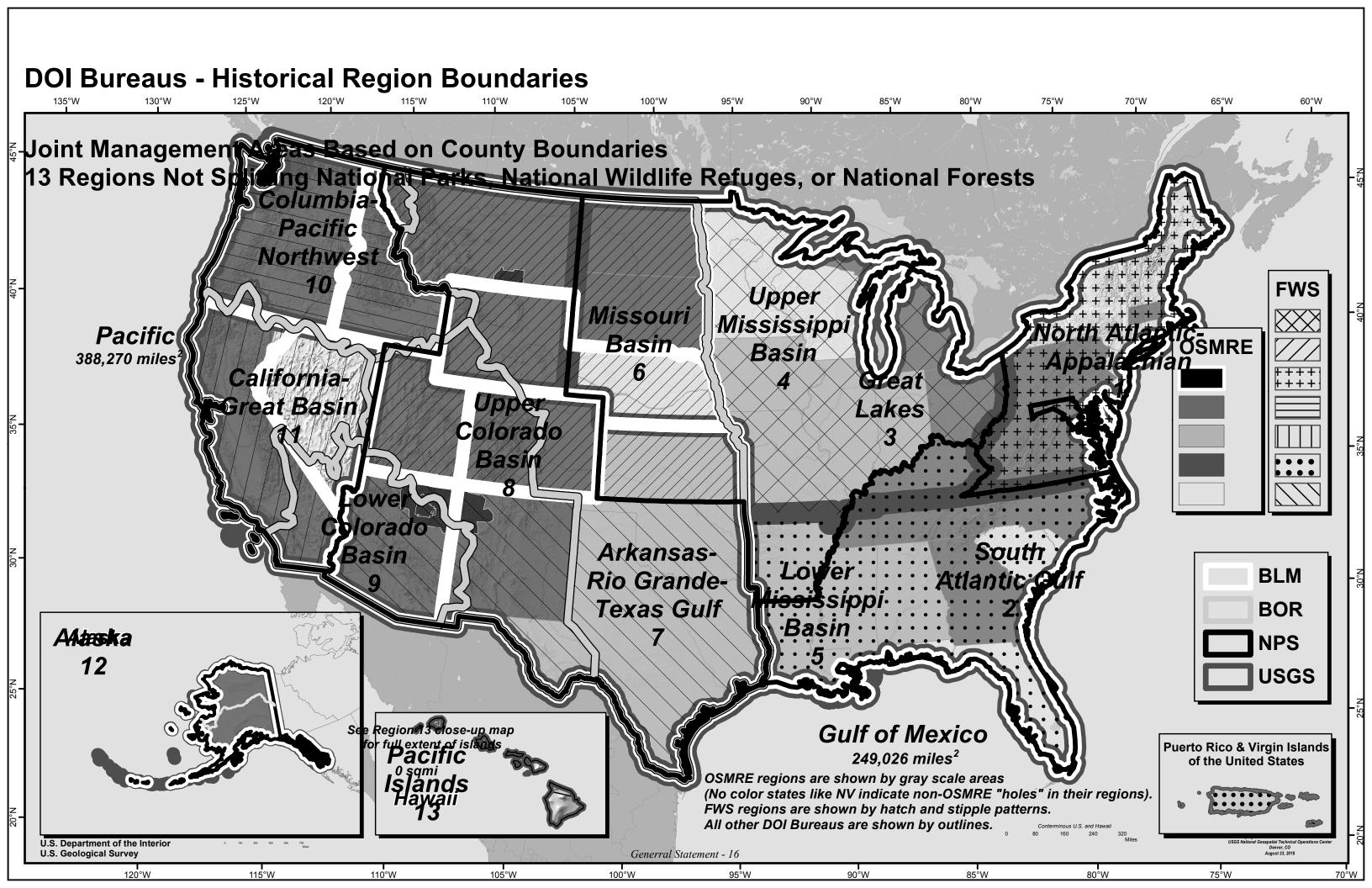
BUREAU OF RECLAMATION Budget Authority - FY 2018 - 2020 (\$ in Thousands)

Appropriation	FY 2018 Actual	FY 2019 Enacted	FY 2020 Request
Water and Related Resources 3/	1,332,124	1,413,392	962,000
Loan Program	0	0	0
Policy and Administration	59,000	61,000	60,000
Working Capital Fund	0	0	0
California Bay-Delta Restoration	37,000	35,000	33,000
Central Valley Project Restoration Fund	41,376	62,008	54,849
Sub-Total - Current Authority	1,469,500	1,571,400	1,109,849
CVP Restoration Fund Offset	(41,376)	(62,008)	(54,849)
Total Net Discretionary Authority	1,428,124	1,509,392	1,055,000
Permanents and Other:			
CRDF, Boulder Canyon Project 1/	84,650	92,840	97,153
Miscellaneous Permanents 1/	849	497	823
Trust Funds	622	2,000	2,000
Federal Lands Recreation Enhancement Act 1/	561	550	569
Loan Program (Subsidy Reestimates/Modification)	0	60	0
Loan Liquidating Account	(1,007)	(875)	(761)
San Joaquin River Restoration Fund	0	0	207,356
Water and Related Resources 1/2/	0	14,998	991
Reclamation Water Settlements Fund	(403)	2,000	122,000
Sub-Total Permanent Authority and Other	85,272	112,070	430,131
GRAND TOTAL	1,513,396	1,621,462	1,485,131

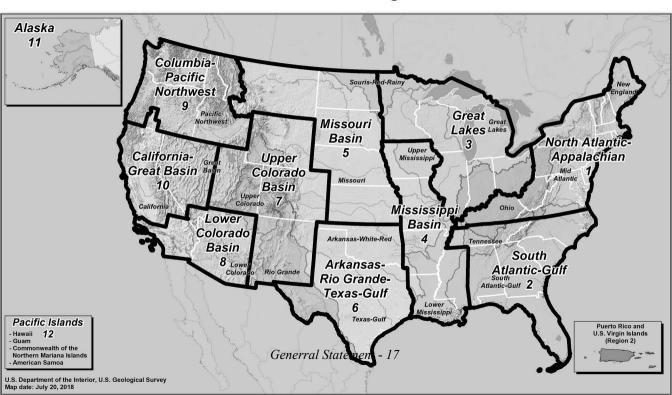
^{1/} Reflects impact of sequestration in these activities

^{2/} Indian Water Rights Settlements indexed increment

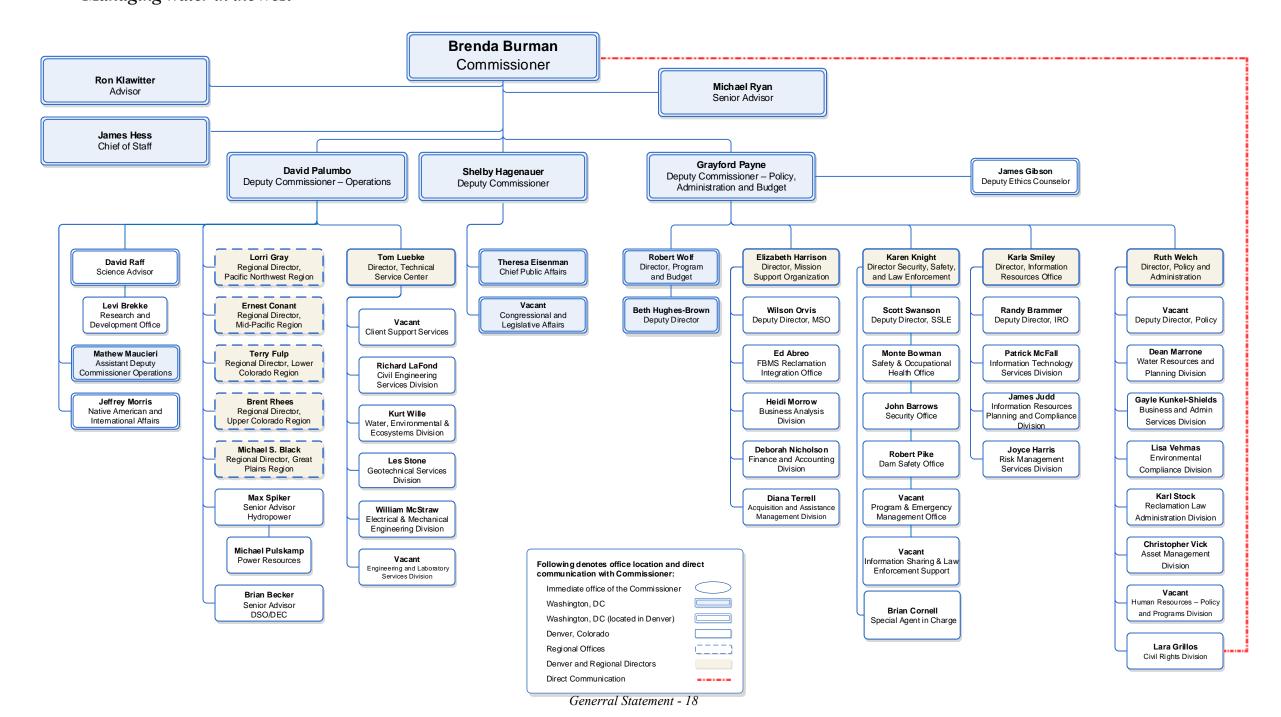
 $^{^{3/}}$ FY 2019 includes \$21,400 provided in Section 505 of Title V of the Public Law 115-244



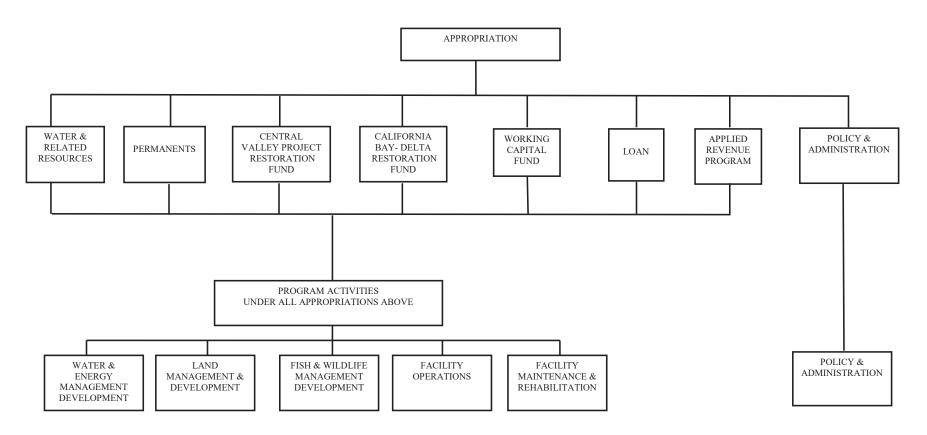
DOI 12 Unified Regions



RECLAMATION Managing Water in the West



DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION



WATER AND RELATED RESOURCES	
Water and Related Resources Table of Contents	
Water and Related Resources Appropriation - Overview	W&RR-05
Summary of Request by Project Table	W&RR-15
Project Regional Crosswalk Table	W&RR-19
Aamodt Litigation Settlement Act	
Ak Chin Indian Water Rights Settlement Act Project	
Animas-La Plata Project, Colorado River Storage Participating Project	W&RR-26
Arbuckle	W&RR-29
Balmorhea Project	W&RR-31
Blackfeet Water Rights Settlement	W&RR-33
Boise Area Projects	W&RR-36
Cachuma Project	W&RR-40
Canadian River Project	W&RR-42
Carlsbad Project	W&RR-44
Central Valley Project (CVP):	
American River Division, Folsom Dam Unit/Mormon Island (Safety of Dams)	W&RR-47
Auburn - Folsom South Unit	W&RR-50
Delta Division	W&RR-52
East Side Division	W&RR-56
Friant Division	W&RR-59
Miscellaneous Project Programs	
Replacements, Additions, and Extraordinary Maintenance Program	
Sacramento River Division	
San Felipe Division	
Shasta Division	
Trinity River Division	
Water and Power Operations	
West San Joaquin Division, San Luis Unit	
Collbran Project	
Colorado-Big Thompson Project	
Colorado River Compliance Activities	
Colorado River Basin Project - Central Arizona Project	
Colorado River Basin Salinity Control Project - Title I	
Colorado River Front Work and Levee System	
Colorado River Basin Salinity Control Program, Title II – Basinwide Program	
Colorado River Storage Project, Section 5, Participating Projects	
Bonneville Unit, Central Utah Project	
Bostwick Park Project	
Colorado River Storage Project (Initial Units)	
Dallas Creek Project	
Dolores Project	
Eden Project	
Emery County Project	
Florida Project	
Hammond Project	
Jensen Unit, Central Utah Project	
· · · · · · · · · · · · · · · · · · ·	
Lyman Project	
Navajo Unit	
Paonia Project	
San Juan-Chama Project	w &KK-119

Seedskadee Project	W&RR-120
Silt Project	W&RR-120
Smith Fork Project	W&RR-120
Vernal Unit, Utah Project	W&RR-120
Colorado River Storage Project, Section 8, Recreational and Fish and Wildlife Facilities	W&RR-122
Glen Canyon Unit	W&RR-123
Navajo Unit	W&RR-123
Wayne N. Aspinall Storage Unit	W&RR-124
Colorado River Water Quality Improvement Program	
Columbia and Snake River Salmon Recovery Project Federal Columbia River Power	
System (FCRPS) ESA Implementation	W&RR-128
Columbia Basin Project	
Crooked River Project	
Crow Tribe Water Rights Settlement Act of 2010	
Deschutes Project	
Eastern Oregon Projects	
Endangered Species Recovery Implementation Program (Platte River Recovery	
Implementation Program)	W&RR-149
Endangered Species Recovery Implementation Program (Upper Colorado and	Wardt 117
San Juan River Basins Endangered Fish Recovery Programs)	W&RR-153
Fort Peck Reservation/Dry Prairie Rural Water System	
Fruitgrowers Dam Project	
Fryingpan-Arkansas Project	
Grand Valley Unit, CRBSCP, Title II	
Hungry Horse Project	
Huntley Project	
Hyrum Project	
Kendrick Project	
· ·	
Klamath Project	
Lahontan Basin Project (Humboldt, Newlands, and Washoe Projects)	
Lake Mead/Las Vegas Wash Program	
Lake Tahoe Regional Development Program	
Leadville/Arkansas River Recovery Project	
Lewis and Clark Rural Water System	
Lewiston Orchards Project	
Lower Colorado River Operations Program	
Lower Rio Grande Water Conservation Project	
Lower Yellowstone Project	
Mancos Project	
McGee Creek Project	
Mid-Dakota Rural Water Project	
Middle Rio Grande Project	
Milk River Project	
Minidoka Area Projects	
Mirage Flats Project	
Mni Wiconi Project	
Moon Lake Project	
Mountain Park Project	
Navajo-Gallup Water Supply Project/Colorado River Storage Participating Project	
Newton Project	
Norman Project	W&RR-235

North Platte Project	
Nueces River Project	W&RR-240
Ogden River Project	W&RR-242
Orland Project	W&RR-244
Paradox Valley Unit, CRBSCP, Title II	W&RR-246
Parker-Davis Project	W&RR-249
Pick-Sloan Missouri Basin Program:	
Ainsworth Unit	W&RR-251
Almena Unit	W&RR-253
Angostura Unit	W&RR-255
Armel Unit	
Belle Fourche Unit	
Bostwick Unit	
Boysen Unit	
Buffalo Bill Dam Modification	
Canyon Ferry Unit	
Cedar Bluff Unit	
Dickinson Unit	
East Bench Unit	
Frenchman-Cambridge Unit	
Garrison Diversion Unit	
Glen Elder Unit	
Heart Butte Unit	
Helena Valley Unit	
Kansas River Area	
Keyhole Unit	
Kirwin Unit	
Lower Marias Unit	
Missouri Basin O&M	
Narrows Unit	
North Loup Unit	
North Platte Area	
Oahe Unit	
Owl Creek Unit	
Rapid Valley Unit	
Riverton Unit	
Shadehill Unit	
Webster Unit	
Yellowtail Unit	
Pine River Project	
Preston Bench Project	
Provo River Project	
Rapid Valley Project	
Rio Grande Project	
Rio Grande Pueblos Project	
Rocky Boy's/North Central Montana Rural Water System	
Rogue River Basin Project, Talent Division	
Salt River Project	
Salton Sea Research Project	
San Angelo Project	
San Carlos Apache Tribe Water Settlement Act Project	w & KK-344

San Luis Valley Project	W&RR-346
Sanpete Project	W&RR-348
Scofield Project	
Shoshone Project	W&RR-351
Solano Project	W&RR-353
Southern Arizona Water Rights Settlement Act Project	W&RR-355
Strawberry Valley Project	W&RR-357
Sun River Project	W&RR-359
Tualatin Project	W&RR-361
Tucumcari Project	W&RR-364
Umatilla Project	W&RR-366
Uncompangre Project	W&RR-369
United States / Mexico Border Issues – Technical Support	W&RR-371
Upper Colorado River Operations Program	W&RR-372
Ventura River Project	W&RR-374
W.C. Austin Project	W&RR-376
Washington Area Projects	W&RR-378
Washita Basin Project	W&RR-381
Weber Basin Project	
Weber River Project	
Wichita Project (Cheney Division)	W&RR-387
Yakima Project	
Yakima River Basin Water Enhancement Project	W&RR-393
Yuma Area Projects	W&RR-399

Water and Related Resources Appropriation FY 2020 Overview

The Fiscal Year (FY) 2020 budget for Water and Related Resources (W&RR), Reclamation's principal operating account, is \$962.0 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 constitute an important driver of economic growth in hundreds of basins throughout the Western States. Reclamation manages 492 dams and 338 reservoirs with the capacity to store over 140 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 2017*, Reclamation's activities, including recreation, support economic activity valued at \$62.6 billion and support approximately 458,000 jobs¹. Reclamation owns 76 hydroelectric power plants – and is responsible for operations at 53 – that account for 15 percent of the hydroelectric capacity and generation in the United States. Annually, Reclamation generates an average of 40 billion kilowatt hours of electricity, enough to meet the annual needs of over 3.8 million households, and collects over \$1.0 billion in gross revenues for the Federal government.

The FY 2020 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 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.
- Core Mission in Framework of Department of the Interior Priorities Performing the core management responsibilities of providing water and power in alignment with Department priorities and the goals in the Strategic Plan of 2018-2022.

The following is the FY 2020 Budget organized by the five programmatic activities:

Table 1: Water and Related Resources (\$ in thousands)

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$537,979	\$249,780
Land Management and Development	\$46,015	\$43,043
Fish and Wildlife Management and Development	\$229,627	\$141,935
Facility Operations	\$301,858	\$297,240
Facility Maintenance and Rehabilitation	\$163,913	\$230,002
Unallocated WIIN Storage	\$134,000	\$0
TOTAL Water and Related Resources (W&RR)	\$1,413,392	\$962,000

¹According to the Department of the Interior's Economic Report FY 2017.

-

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 \$434.8 million. The request for the two "Facility Operations Maintenance and Rehabilitation" activities (i.e., Facility Operations and Facility Maintenance and Rehabilitation) is \$527.2 million.

The funding proposed in Reclamation's FY 2020 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 water supply challenges in the West to ensure the efficient generation of energy, varied use of our resources, celebration of America's great recreation opportunities, and to fulfill our commitments to tribal nations. The budget request prioritizes funding to projects and programs that most effectively implement Reclamation's programs and its management responsibilities for its water and power resources and infrastructure in the West.

Department of the Interior initiatives include:

Modernizing Our Organization and Infrastructure for the Next 100 Years

Dam Safety Program – 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 \$92.8 million for the Safety of Dams Evaluation and Modification Program provides for risk management activities at Reclamation's high and significant hazard dams where loss of life or significant economic damage would likely occur if the dam were to fail. The budget also includes preconstruction and construction activities for several ongoing and planned Dam Safety modifications. 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.

Extraordinary Maintenance (XM) activities - The proposed budget also includes \$114.1 million in appropriations for Extraordinary Maintenance (XM) activities across Reclamation. This funding is critical for the operation and maintenance of projects to ensure delivery of water and power benefits. Reclamation's XM 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. Table 2 represents only the budget for discretionary appropriations. Additional XM items are directly funded by revenues, customers, or other Federal agencies (e.g., Bonneville Power Administration).

Table 2: Extraordinary Maintenance Activities

(\$ in thousands)

(\$ III tilousullus)					
FY 2019	FY 2020				
Enacted	President's Budget				
\$56,220	\$114,079				

Review of Projects with Multi-Year Funding Budgets above \$10 Million – Reclamation has a stringent 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 to the degree within our control and seek appropriate cost share.

Create a Conservation Stewardship Legacy

Conserving Our Land and Water is both a mission and a critical goal of the Department; managing, protecting, enhancing, and conserving water are Reclamation's contributions to that goal. Reclamation plays a key role in ensuring reliable, secure water supplies. 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 developing strategies to help ensure water supplies for future generations. The funding proposed in Reclamation's FY 2020 budget supports Reclamation's collaboration with non-Federal partners in efforts to address emerging water demands and water shortage issues in the West, to promote improved water management and conservation, and to take actions to mitigate adverse environmental impacts of Reclamation projects.

Virtually all of Reclamation's programs and projects address water conservation in some fashion. Basin operations and maintenance of facilities enables delivery of project benefits, to include water supply, conservation, and storage. Resource management efforts, including land acquisition, drought response planning, water management administration/oversight, and research and development activities all ensure that Reclamation utilizes the most efficient processes, strategic planning, and technology available to the Federal government. Reclamation's water conservation grants and Water Reclamation and Reuse Program support the reliability of the Nation's water supply 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. Through programs such as the Drought Response Program, Reclamation helps communities manage drought through on-the-ground projects in advance of a crisis, and through the development of long-term strategies through contingency and general planning.

Sustainably Develop Our Energy and Natural Resources

Reclamation's FY 2020 request includes \$1.03 million to support Department domestic energy security initiatives – facilitating the development of untapped hydropower potential on Federal water resource projects through collaborative regulatory reform, technological and operational innovation, and stakeholder outreach. These activities allow Reclamation to derive additional value and revenue from existing public infrastructure – reducing project operating costs (e.g., water and power delivery costs). Revenues derived from hydropower production are invested in the underlying Federal infrastructure to ensure continued, reliable operations and benefits.

The requested funding supports continued implementation of Department domestic energy security initiatives, increasing Reclamation Project hydropower capabilities and value. These activities include: policy development, oversight, and support services facilitating non-Federal hydropower development on Reclamation Projects through Lease of Power Privilege and Federal Energy Regulatory Commission (FERC) licensing; support of Reclamation automated data collection and archiving systems designed to achieve operational efficiencies and reduce power program costs, enabling Reclamation to perform fleetwide data analytics to anticipate failures, increase unit reliability, and pursue predictive maintenance strategies supporting long-term asset management; support of Reclamation's Hydropower Efficiency Research Systems work, designed to achieve operational efficiencies at Reclamation hydropower facilities; information sharing, coordination, and strategic planning with Federal partners and industry; and implementation of power rate reduction strategies (e.g., achieving supply and demand-side efficiencies and ensuring appropriate cost allocations, rate setting, and repayment) to maximize the value of Reclamation hydropower to our customers. Funding will also support Tribes in the development of untapped energy potential to better manage water resources. These activities will be pursued in coordination with Hydropower Memorandum of Understanding (MOU) partners, the Department of Energy and U.S. Army Corps of Engineers.

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 3: Bonneville Power Administration

(\$ in thousands)

Project	Power O&M FY 2019	Small Capital Replacements & Additions FY 2019	Major Replacements & Additions FY 2019	Power O&M FY 2020	Small Capital Replacements & Additions FY 2020	Major Replacements & Additions FY 2020
Boise Area	\$6,631	\$1,279	\$9,654	\$5,526	\$702	\$0
Columbia Basin	\$131,825	\$4,000	\$68,619	\$122,570	\$4,000	\$43,513
Hungry Horse	\$8,556	\$385	\$15,778	\$7,252	\$450	\$7,230
Minidoka Area	\$9,604	\$1,205	\$58	\$10,572	\$185	\$25
Rogue River	\$1,180	\$50	\$0	\$1,370	\$50	\$0
Yakima	\$3,327	\$135	\$1,980	\$3,109	\$100	\$4,178
TOTAL	\$161,123	\$7,054	\$96,089	\$150,399	\$5,487	\$54,946

Ensure Tribal Sovereignty Means Something

Reclamation's efforts to support tribal nations are long-standing and range from endangered species restoration to rural water projects and implementation of water rights settlement actions. Funding to support tribal nations is included within several projects; examples include:

The Ak Chin Water Rights Settlement Act Project budget of \$15.3 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 \$11.7 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 2020 budget continues the implementation of the Blackfeet *Indian Water Rights Settlement* enacted in December 2016, two settlements enacted in December 2010 (Crow and the Aamodt Litigation) and the 2009 authorized Navajo-Gallup Water Supply Project.

Additionally, other bureau projects benefit Tribes under long-standing water rights settlements, such as the Columbia/Snake River Salmon Recovery Project (Nez Perce/Snake River Settlement), Animas-La Plata Project, and San Carlos Apache Tribe Water Settlement Act project. Other projects more generally benefit tribal members, such as the Klamath Project, Trinity River Restoration Program within the Central Valley Project, Yakima River Basin Water Enhancement Project, and three of the five authorized rural water projects discussed below benefit tribal nations.

Rural Water Projects – Millions of Americans still live without safe drinking water. The FY 2020 Reclamation budget has \$27.8 million for ongoing authorized projects. This includes construction funding of \$8.1 million and \$19.7 million for operation and maintenance. Congress has expressly authorized Reclamation to undertake the design and construction of specific projects intended to deliver potable water supplies to defined rural communities. The FY 2020 budget requests funding for five projects located primarily in Montana, 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 on the Mni Wiconi project and the project is now in operation and maintenance status. The other rural water project for which funding is requested is the Lewis and Clark Rural Water System (South Dakota, Minnesota, Iowa).

Reclamation has applied prioritization criteria for use in the budget formulation process to determine the amounts that will be requested for construction. The criteria used for FY 2020 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, and 5) meets water, energy and other priority objectives. The focus in the FY 2020 budget is for water systems that serve Native Americans.

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

Program ^{1/}	FY 2019 Enacted	FY 2020 President's Budget
Mni Wiconi Project	\$13,475	\$13,101
Pick-Sloan Missouri Basin Program - Garrison Diversion Unit (Rural Water component only)	\$39,673	\$10,148
Rocky Boy's/North Central MT Rural Water System	\$30,000	\$1,984
Fort Peck Reservation/Dry Prairie Rural Water System	\$30,200	\$2,431
Lewis and Clark Rural Water System	\$15,000	\$100
Eastern New Mexico Water Supply – Ute Reservoir	\$4,347	\$0
Rural Water Programs – Total	\$132,695	\$27,764

^{1/} This table includes both construction funding and operations and maintenance funding. Reclamation provides operation and maintenance funding for Tribal components of two projects -- the Mini Wiconi project (\$13.1 million) and Garrison's rural water component of the project (\$6.6 million), which is requested in the Pick-Sloan Missouri Basin Program, Garrison Project.

Restore Trust and Be a Good Neighbor

Reclamation has shifted over many decades from development of single-purpose agricultural projects toward a multipurpose approach to water resource development that includes recreation among other additional purposes. Today, Reclamation plays a major role in meeting the increasing public demands for access to water-based outdoor recreation facilities and opportunities.

The recreation areas developed as a result of Reclamation water projects are among the Nation's most popular for water-based outdoor recreation. Reclamation projects include approximately 7.8 million acres of land and water and 289 recreation and wildlife areas (42 of which are directly managed by Reclamation), 550 campgrounds and over 1,300 miles of hiking trails available to the public resulting in approximately

34 million visits annually. This includes 12 designated National Recreation Areas that are managed by the National Parks Service or United States Forest Service.

Reclamation's land and water-based outdoor recreation opportunities often include activities such as camping, hiking, boating, special recreation and youth programs, hunting, fishing, photography, wildlife viewing, and natural and cultural resources, and they provide unique educational and interpretive opportunities. Reclamation projects have also created national wildlife refuges and state wildlife management areas that offer valuable fish and wildlife habitat along with hunting and fishing opportunities. Reclamation directly manages 42 recreation areas. In addition, Reclamation projects have also created a variety of recreation opportunities on the rivers downstream from the dams, including world class whitewater rafting and fishing opportunities.

Reclamation's Recreation Fee program supports this effort. Section 133 of the Federal Lands Recreation and Enhancement Act extends the authorization to September 30, 2020. Reclamation estimates it will collect about \$569,000 in recreation fees in 2019 under this authority and will use them to enhance the visitor experience at Interior facilities.

Reclamation has built long standing, mutually beneficial partnerships with other public entities to keep such opportunities available to the public. Through non-Federal partnership, Reclamation assists local communities in attracting recreation-related investments and involves local citizens in the decision-making process.

Protecting Our People and the Border

In support of the Department's mission to place a high priority on safety, security, and preparedness, and to uphold its responsibilities for protecting lives, resources, and property through such programs as law enforcement, health and safety, security, and emergency management, Reclamation performs a variety of emergency preparedness and Continuity of Operations (COOP) exercises and activities. To remain vigilant and to protect our critical assets, facilities and systems, critical information, and most importantly, the employees, contractors, and public at or near Reclamation facilities, Reclamation has developed a law enforcement staffing model that determines the security guard capabilities and staffing levels that are needed, based on a dam's current missions and objectives, security risks, and public safety needs, as 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. The FY 2020 budget supports these efforts with a request for \$36.4 million in Site Security. Site Security funding ensures the safety and security of the public by funding physical security upgrades at critical assets, funding law enforcement and risk/threat analysis, personnel security, information security, security risk assessments, security-related studies, guards and patrols, as well as operation and maintenance costs that could exceed the reimbursable ceiling.

Other Budget Highlights:

Research and Development

Science and Technology Program (S&T) – 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 projects typically have strong cost-sharing and collaboration across stakeholders, other agencies, universities, and with Reclamation's technical experts and resource managers. The Program addresses a wide range of science and technical challenges facing Reclamation water and power managers spanning Reclamation's core mission; they are categorized in the following areas: Water Infrastructure, Power and Energy, Water Operations and Planning, Developing New Water Supplies, and Environmental Compliance Issues Confronting Water and Power Delivery.

The FY 2020 request at \$11.0 million supports continued science and technology projects, water and power technology prize competitions, technology transfer, and dissemination/outreach activities addressing high-priority water and power management technical obstacles in water management, hydropower generation, infrastructure management, and environmental compliance. The S&T Program 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) – The DWPR 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 that water managers need to address challenges in water availability and increased demand for fresh water supplies. Program funds are awarded as financial assistance through competitive, merit-based, cost-shared cooperative agreements with universities, public, private sector, and non-profit organizations on a cost-shared basis.

The FY 2020 request at \$2.6 million supports new and continued projects in the two funding areas: laboratory scale research studies and pilot-scale testing projects. Funding also supports the operation and maintenance of Reclamation's Brackish Groundwater National Desalination Research Facility (BGNDRF), which will continue to support research- to pilot-scale testing projects, as well as engage private-sector and other non-Federal interests via technology transfer activities.

WaterSMART Program

The funding proposed in Reclamation's FY 2020 WaterSMART budget (\$19.9 million) supports Reclamation's collaboration with non-Federal partners in efforts to increase water supply reliability through investments in existing infrastructure and attention to local water conflicts.

The WaterSMART Program includes funding for cost-shared grants for water management improvement projects, Title XVI water – reclamation and reuse research, support for collaborative watershed groups, planning and design of water conservation activities through the Water Conservation Field Services Program (WCFSP); and a comprehensive approach to drought planning and implementation actions that address water shortages.

Table 5: WaterSMART Program (\$ in thousands)

Program	FY 2019 Enacted	FY 2020 President's Budget
WaterSMART Grants	\$34,000	\$10,000
Cooperative Watershed Management Program	\$2,250	\$250
Basin Studies	\$5,200	\$2,000
Drought Response	\$9,000	\$2,901
Water Conservation Field Services Program (WCFSP)	\$4,179	\$1,750
Title XVI Projects	\$58,617	\$3,000
Program Total	\$113,246	\$19,901

Through WaterSMART Grants, Reclamation will continue to help address western water issues by providing cost-shared assistance on a competitive basis. On-the-ground 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 benefits are given the greatest consideration for funding.

The Department will continue to provide financial assistance to establish and expand collaborative watershed groups through the Cooperative Watershed Management Program. In FY 2020, funding opportunity announcements will be used to continue to allocate program funding through a competitive process for the establishment or expansion of watershed groups.

Reclamation will also address risks to water supplies from drought, population growth, long-term trends in weather and precipitation patterns, and increased water needs for environmental purposes through the Basin Study Program, which implements Section 9503 of the SECURE Water Act through a complementary set of activities.

Through the Drought Response Program, Reclamation has implemented a comprehensive 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. These Comprehensive Drought Plans and Drought Resiliency Projects will help Reclamation avoid drought-related crises in the short term, while laying a foundation for drought resiliency in the long term.

Through the WCFSP, Reclamation will continue to make cost-shared financial assistance available on a competitive basis at the area and regional office levels development of water conservation plans and design of water management improvements, identifying water management improvements through System Optimization Reviews, and improving the understanding of water conservation technologies through demonstration activities, as well as technical assistance from Reclamation staff.

The Title XVI Water Reclamation and Reuse Program was authorized by P.L.102-575 in 1992, as amended. Through this program Reclamation provides financial and technical assistance to local water agencies for water reclamation and reuse research. Projects will be identified for funding through a competitive process using programmatic criteria that are focused on helping to secure and stretch water supplies or addressing specific water supply issues in a cost-effective manner and meeting other program goals. 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.

River Restoration, Project Operations, and Environmental Compliance

River restoration and associated environmental compliance is a key to Reclamation's ability to continue to deliver water and generate power in an efficient manner. 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 well as its role as a water supplier and power generator, thus better positioning Reclamation to address the ongoing challenges presented by drought, increasing populations, the growing water demand associated with energy generation, and environmental needs. Reclamation continues efforts to reach agreements with non-Federal and Federal partners to share in the cost of water resource management and development.

The FY 2020 budget provides \$144.3 million for operating, managing and improving California's *Central Valley Project* (CVP). Funding for CVP includes \$14.4 million for the Trinity River Restoration program, which includes development of a comprehensive monitoring and adaptive management program for fishery restoration and construction of rehabilitation projects at various sites along the Trinity River.

The budget includes \$31.3 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, \$5.5 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. Funding of \$4.1 million is for activities related to the continued implementation of Minute 323, the successor agreement to Minute 319 with Mexico. Minute 323, the current agreement, was developed and facilitated by the U.S. and Mexican Sections of the International Boundary and Water Commission (IBWC). Of the LCROP total, \$16.9 million will be used for the LCR MSCP. The long-term goal of the LCR MSCP is to offset impacts of operations, such as water delivery and power production, on 27 native species and their habitats in compliance with the Endangered Species Act. 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 information to gauge the effectiveness of existing conservation measures.

The *Klamath Project* budget is \$16.1 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 \$22.6 million, of which \$10.6 million will continue 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 the Fish and Wildlife Service, New Mexico Department of Game and Fish, and other stakeholders.

To help secure local water supplies, the FY 2020 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 \$9.4 million for Endangered Species Act Recovery Implementation programs. This includes \$4 million to implement the Platte River Endangered Species Recovery Implementation Program (Program) as the Program is scheduled to move to the next phase of implementation. 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.

The Endangered Species Program also provides \$2.9 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. Additional funding for work to benefit endangered species is also found in other projects and programs within the Water and Related Resources appropriation.

A total of \$21.4 million of the Reclamation's request is consistent with discretionary funding received in the FY 2019 Energy and Water Development appropriations bill (P.L. 115-244, section 505), for "an additional amount for "Department of the Interior-Bureau of Reclamation-Water and Related Resources",

to carry out environmental stewardship and endangered species recovery efforts pursuant to the Grand Canyon Protection Act of 1992 (Public Law 102-575), Public Law 106-392, the Colorado River Basin Project Act (43 U.S.C. 155l(b)), and the Act of April 11, 1956 (commonly known as the "Colorado River Storage Project Act") (43 U.S.C. 620n)." This funding was allocated to Colorado River Activities. The same amounts are requested for FY 2020, under the same authorities.

The *Columbia and Snake River Salmon Recovery* Federal Columbia River Power System (FCRPS) budget of \$16.0 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 \$10.8 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.

Appropriation Ceilings

Section 301 of the Reclamation States Emergency Drought Relief Act of 1991 (43 U.S.C. 2241) authorized \$90.0 million to carry out drought emergency assistance and drought contingency planning activities. An additional \$30 million of appropriation ceiling was authorized in P.L. 115-141, Consolidated Appropriations Act, 2018. Reclamation estimates that approximately \$28 million of the authorized appropriations ceiling will remain after FY 2019.

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

- Secure Water Act
 - o Language to increase ceiling from \$480 million to \$530 million
- Animas-La Plata Deferred Construction
 - o Language included with budget request to authorize appropriations to complete the Federal construction obligation to Navajo Nation

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.

Bureau of Reclamation Summary of Request by Project - Water and Related Resources (\$000)

(20)	00)					
			FY 2019		FY 2020	
				President's		
	Legacy			Budget	Other Fed /	Total
D	0 2	Ct-t	E 4 . 1	0		
Project/Program	Region	States	Enacted	Request	Non-Fed	Program
Ak Chin Indian Water Rights Settlement Act Project	LC	AZ	16,200	15,311	-	15,311
Animas-La Plata Project, Colorado River Storage Participating Project	UC	CO	2,797	10,238	-	10,238
Arbuckle Project	GP	OK	249	242	5	247
Balmorhea Project	UC	TX	50	32	_	32
Boise Area Projects	PN	ID	6,135	5,051	7,118	12,169
Cachuma Project					7,110	
3	MP	CA	1,568	1,644	-	1,644
Canadian River Project	GP	TX	145	122	-	122
Carlsbad Project	UC	NM	4,851	3,450	61	3,511
Central Valley Project:						
American River Division, Folsom Dam Unit/Mormon Island (SOD)	MP	CA	10,215	10,414	6,545	16,959
Auburn-Folsom South Unit	MP	CA	2,219	2,219	0,0.0	2,219
					-	
Delta Division	MP	CA	22,704	10,719	-	10,719
East Side Division	MP	CA	4,062	4,062	2,200	6,262
Friant Division:						
Friant Division	MP	CA	4,717	4,919	_	4,919
San Joaquin River Restoration	MP	CA	35,500	28,264	209,356	237,620
	MP	CA	18,621	8,140	42,127	50,267
Miscellaneous Project Programs					,	
Replacements, Additions, and Extraordinary Maint. Program	MP	CA	18,827	28,780	6,799	35,579
Sacramento River Division	MP	CA	14,290	2,170	-	2,170
San Felipe Division	MP	CA	283	291	-	291
San Joaquin Division	MP	CA	_		8,572	8,572
Shasta Division	MP	CA	12,934	8,817	10,600	19,417
Trinity River Division						
J	MP	CA	17,068	14,448	7,520	21,968
Water and Power Operations	MP	CA	22,782	13,421	8,386	21,807
West San Joaquin Division, San Luis Unit	MP	CA	11,660	7,666	-	7,666
Central Valley Project subtotal			195,882	144,330	302,105	446,435
Collbran Project	UC	CO	2,601	2,055	110	2,165
				,	110	
Colorado River Compliance Activities (ESA/NEPA/GCPA)	UC	Various	21,400	21,400	-	21,400
Colorado River Basin Project - Central Arizona Project	LC	AZ	16,120	6,392	222	6,614
Colorado River Basin Salinity Control Project - Title I	LC	AZ	15,453	14,739	-	14,739
Colorado River Basin Salinity Control Project, Title II - Basinwide Prog.	UC	CO	8,000	10,000	4,286	14,286
Colorado River Front Work and Levee System	LC	ΑZ	3,803	2,303	_	2,303
Colorado River Water Quality Improvement Program	UC, LC	Various	940	740	_	740
	GP				1 506	
Colorado-Big Thompson Project		CO	14,175	13,609	1,506	15,115
Columbia and Snake River Salmon Recovery Project	PN	ID	20,300	16,000	-	16,000
Columbia Basin Project:						
Columbia Basin Project (Ephrata)	PN	WA	12,399	6,417	3,002	9,419
Columbia Basin Project (Grand Coulee)	PN	WA	8,860	14,246	179,835	194,081
Columbia Basin Project subtotal			21,259	20,663	182,837	203,500
·	D) 7	0.70				
Crooked River Project	PN	OR	725	864	301	1,165
Colorado River Storage Project (CRSP), Section 5	UC	Various	9,935	8,601	3,276	11,877
Colorado River Storage Project (CRSP), Section 8	UC	Various	3,347	3,078	-	3,078
Dam Safety Program:						
Department of the Interior Dam Safety Program	Bureauwide	Various	1,300	1,300	_	1,300
Initiate Safety of Dams Corrective Action	Bureauwide	Various	71,000	72,187		72,187
					-	
Safety Evaluation of Existing Dams	Bureauwide	Various	20,284	19,284	-	19,284
Dam Safety Program subtotal	<u> </u>		92,584	92,771	-	92,771
Deschutes Project	PN	OR	575	681	50	731
Eastern Oregon Projects	PN	OR	722	1,339	25	1,364
Emergency Planning and Disaster Response Program					23	
	Bureauwide	Various	1,300	1,250	-	1,250
Endangered Species Recovery Implementation Program (Bureauwide)	Bureauwide	Various	4,000	2,500	-	2,500
Endangered Species Recovery Implementation Program (Platte River)	UC	Various	12,350	4,000	3,816	7,816
Endangered Species Recovery Implementation Program (Upper CO and San						
Juan River Basins)	GP	Various	4,302	2,850	_	2,850
Environmental Program Administration	Bureauwide	Various	1,844	1,523		1,523
					-	
Examination of Existing Structures	Bureauwide		9,123	9,349	-	9,349
Fruitgrowers Dam Project	UC	CO	189	195	-	195
Fryingpan-Arkansas Project	GP	CO	14,076	10,019	75	10,094
General Planning Activities	Bureauwide	Various	2,000	2,132	-	2,132
Grand Valley Unit, CRBSCP, Title II	UC	CO	2,832	2,018	782	2,800
	PN					
Hungry Horse Project	ΓIN	MT	434	476	14,932	15,408

Image: Project Program Region Region Region Prosidency Project Total				FY 2019		FY 2020	
Project Project Project Project Project Project Project Project Pr				11 2017	President's	1 1 2020	
Region Sues Danabed Region Sues Danabed Region Sues Danabed Region Sues Sues		Legacy			Budget	Other Fed /	Total
Hantley Project	Project/Program	0 2	States	Enacted	Request	Non-Fed	Program
Hyroun Project U.C.	Ţ Ç		MT	53		-	
Almond Indian Water Rights Settlement		UC	UT	287	323	-	323
Blacketen Indian Water Rights Settlement	Indian Water Rights Settlements:		•				
Crow Tribe Water Rights Settlement	Aamodt Indian Water Rights Settlement	UC	NM	8,301	8,301	12,558	20,859
Navago Gallap Water Supply		GP	MT	18,000	10,000	-	10,000
Too Pueblo Indian Water Rights Settlement		GP			,		
Indian Water Rights Settlements subtoal				69,603	69,182	110,558	179,740
Kendrick Project GP	Taos Pueblo Indian Water Rights Settlement	UC	NM				
Klamath Project (Humbolt, Newlands, and Washoe Projects) MP NV 25,831 9,939 13,054 13,055 13,054 13,055 13,054 13,055							
Lahottan Basin Project (Humbolt, Newlands, and Washoe Projects)							
Lake Mead/Las Vegas Wash Program							
Lake Table Regional Development Program					,		
Land Resources Management Program	C C					1	
Lead-ville/Arkansas River Recovery Project							
Lewiston Orchards Project						-	
Lower Colorando River Operations Program						-	
Lower Rio Grande Water Conservation Project	,						
Lower Vellowstone Project						r e	
Mancos Project						-	
MGCec Creck Project						12	
Mid-Dakota Rural Water Project GP SD 15 15							
Middle Rio Grande Project							
Milk River Project/St. Mary Storage Division GP MT 1,94 3,451 374 3,825 Minidoka Area Projects PN ID 6,692 5,188 16,532 21,720 Mirage Flast Project GP NE 111 84 - 84 Miscellaneous Flood Control Operations Bureauwide Various 980 832 - 832 Moon Lake Project UC UT 124 122 - 122 Mountain Park Project GP OK 707 631 5 636 Native American Affairs Program Bureauwide Various 11,685 11,685 - 11,685 Negotation and Administration of Water Marketing Bureauwide Various 11,685 11,685 - 11,685 Newton Project UC UT 154 185 - 11,685 - 11,685 - 11,685 - 11,685 - 11,685 - 11,685 - 11,685 - 11,685 - 11,685 <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td>				_			
Minidoka Area Projects							
Mirage Flats Project GP NE							
Miscellaneous Flood Control Operations	,					-	
Moon Lake Project	E j					_	
Mountain Park Project GP OK 707 631 5 636 Native American Affairs Program Bureauwide Various 11,685 11,685 - 11,685 Newton Administration of Water Marketing Bureauwide Various 2,462 2,308 - 2,308 Newton Project UC UT 154 185 - 185 Norman Project GP OK 382 437 35 472 North Platte Project GP OK 382 437 35 472 North Platte Project GP WY 1,417 1,541 352 1,893 Nueces River Project GP TX 976 975 15 990 Ogden River Project UC UT 510 361 - 361 Operation and Program Management Bureauwide Various 3,641 2,629 - 2,629 Orland Project MP CA 873 873 - 873 Paradox Valley Unit, CRBSCP, Title II UC CO 4,313 4,047 1,497 5,544 Parker-Davis Project LC Various - 17,704 17,704 Pine River Project UC CO 467 415 - 415 Pick-Sloam Missouri Basin Program (P-SMBP): Alimsourh Unit, P-SMBP GP NE 260 157 23 180 Almena Unit, P-SMBP GP SS 525 479 25 504 Almena Unit, P-SMBP GP SD 818 998 - 998 Armel Unit, P-SMBP GP SD 818 998 - 998 Armel Unit, P-SMBP GP NE S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NE S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NE S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01 1,217 140 1,357 Bostwick Unit, P-SMBP GP NF S01						_	
Native American Affairs Program Bureauwide Various 11,685 - 11,685 Negotiation and Administration of Water Marketing Bureauwide Various 2,462 2,308 - 2,308 Newton Project UC UT 154 185 - 185 Norman Project GP OK 382 437 35 472 North Platte Project GP OK 382 437 35 472 North Platte Project GP WY 1,417 1,541 352 1,893 Nucesa River Project GP TX 976 975 15 990 Ogden River Project UC UT 510 361 - 361 Operation and Program Management Bureauwide Various 3,641 2,629 - 2,629 Orland Project MP CA 873 873 - 873 873 - 873 Paradox Valley Unit, CRBSCP, Title II UC CO 4,313 4,047 1,497 5,544 Parker-Davis Project UC Various August Project UC Various Vario						5	
Negotiation and Administration of Water Marketing Bureauwide Various 2,462 2,308 - 2,308 Newton Project UC	3					_	
Newton Project UC		Bureauwide	Various		,	-	
North Platte Project GP WY 1,417 1,541 352 1,893 Nueces River Project GP TX 976 975 15 990 Ogden River Project UC UT 510 361 - 361 Operation and Program Management Bureauwide Various 3,641 2,629 - 2,629 Orland Project MP CA 873 873 - 873 Paradox Valley Unit, CRBSCP, Title II UC CO 4,313 4,047 1,497 5,544 Parker-Davis Project LC Various - 17,704 17,704 Pine River Project UC CO 467 415 - 415 Pick-Sloan Missouri Basin Program (P-SMBP): Ainsworth Unit, P-SMBP GP KS 525 479 25 504 Angestura Unit, P-SMBP GP KS 525 479 25 504 Angestura Unit, P-SMBP GP SD 818 998 - 998 Armel Unit, P-SMBP GP SD 1,501 1,217 140 1,357 Bostwick Unit, P-SMBP GP NE, KS 1,266 1,098 366 1,464 Boysen Unit, P-SMBP GP WY 2,084 2,410 3,143 5,553 Buffalo Bill Dam Modification, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 5,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 5,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 5,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 5,006 20,320 Germson		UC	UT	154	185	-	185
Nueces River Project	Norman Project	GP	OK	382	437	35	472
Ogden River Project UC UT 510 361 - 361 Operation and Program Management Bureauwide Various 3,641 2,629 - 2,629 Orland Project MP CA 873 873 - 873 Paradox Valley Unit, CRBSCP, Title II UC CO 4,313 4,047 1,497 5,544 Parker-Davis Project LC Various - - 17,704 17,704 Pine River Project LC Various - - 17,704 17,704 Pine River Project LC Various - - 17,704 17,704 Pine River Project LC Various - - 17,704 17,704 Pine River Project LC Co 467 415 - 415 Pick Sloan Missouri Basin Program (P-SMBP) GP NE 260 157 23 180 Almea Unit, P-SMBP GP NE SD 818 998 -	North Platte Project	GP	WY	1,417	1,541	352	1,893
Departion and Program Management	Nueces River Project		TX		975	15	990
Orland Project MP CA 873 873 - 873 Paradox Valley Unit, CRBSCP, Title II UC CO 4,313 4,047 1,497 5,544 Parker-Davis Project LC Various - - 17,704 17,704 Pick-Sloan Missouri Basin Program (P-SMBP): UC CO 467 415 - 415 Almen Unit, P-SMBP GP NE 260 157 23 180 Almen Unit, P-SMBP GP NE 260 157 23 180 Almen Unit, P-SMBP GP KS 525 479 25 504 Angostura Unit, P-SMBP GP SD 818 998 - 998 Armel Unit, P-SMBP GP SD 818 998 - 998 Armel Unit, P-SMBP GP CO 403 388 - 388 Belle Fourche Unit, P-SMBP GP NE, KS 1,266 1,098 366 1,464		UC	UT	510	361	-	361
Paradox Valley Unit, CRBSCP, Title II	Operation and Program Management	Bureauwide	Various		,	-	2,629
Parker-Davis Project	j ,					-	
Pine River Project				4,313	4,047		
Pick-Sloan Missouri Basin Program (P-SMBP): Ainsworth Unit, P-SMBP GP NE 260 157 23 180 Almena Unit, P-SMBP GP KS 525 479 25 504 Angostura Unit, P-SMBP GP SD 818 998 - 998 Armel Unit, P-SMBP GP CO 403 388 - 388 Belle Fourche Unit, P-SMBP GP SD 1,501 1,217 140 1,357 Bostwick Unit, P-SMBP GP NE, KS 1,266 1,098 366 1,464 Boysen Unit, P-SMBP GP WY 2,084 2,410 3,143 5,553 Buffalo Bill Dam Modification, P-SMBP GP WY 2,797 3,547 24 3,571 Canyon Ferry Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP ND 449 564 15 579 East Bench Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP NT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP NE, KS 463 385 - 385 Lower Marias Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306	j.					17,704	
Ainsworth Unit, P-SMBP GP NE 260 157 23 180 Almena Unit, P-SMBP GP KS 525 479 25 504 Angostura Unit, P-SMBP GP SD 818 998 - 998 Angostura Unit, P-SMBP GP SD 818 998 - 998 Angostura Unit, P-SMBP GP CO 403 388 - 388 Belle Fourche Unit, P-SMBP GP SD 1,501 1,217 140 1,357 Bostwick Unit, P-SMBP GP NE, KS 1,266 1,098 366 1,464 Boysen Unit, P-SMB GP WY 2,084 2,410 3,143 5,553 Buffalo Bill Dam Modification, P-SMBP GP WY 2,084 2,410 3,143 5,553 Buffalo Bill Dam Modification, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,00		UC	CO	467	415	-	415
Almena Unit, P-SMBP						1	
Angostura Unit, P-SMBP GP SD 818 998 - 998 Armel Unit, P-SMBP GP CO 403 388 - 388 Belle Fourche Unit, P-SMBP GP SD 1,501 1,217 140 1,357 Bostwick Unit, P-SMBP GP NE, KS 1,266 1,098 366 1,464 Boysen Unit, P-SMBP GP WY 2,084 2,410 3,143 5,553 Buffalo Bill Dam Modification, P-SMBP GP WY 2,797 3,547 24 3,571 Canyon Ferry Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP KS 574 510 - 510 Dickinson Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP GP MT 725 808 8	· · · · · · · · · · · · · · · · · · ·						180
Armel Unit, P-SMBP GP CO 403 388 - 388 Belle Fourche Unit, P-SMBP GP SD 1,501 1,217 140 1,357 Bostwick Unit, P-SMBP GP NE, KS 1,266 1,098 366 1,464 Boysen Unit, P-SMBP GP WY 2,084 2,410 3,143 5,553 Buffalo Bill Dam Modification, P-SMBP GP WY 2,797 3,547 24 3,571 Canyon Ferry Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP KS 574 510 - 510 Dickinson Unit, P-SMBP GP ND 449 564 15 579 East Bench Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 <t< td=""><td>· ·</td><td></td><td></td><td></td><td></td><td>1</td><td></td></t<>	· ·					1	
Belle Fourche Unit, P-SMBP GP SD 1,501 1,217 140 1,357 Bostwick Unit, P-SMBP GP NE, KS 1,266 1,098 366 1,464 Boysen Unit, P-SMB GP WY 2,084 2,410 3,143 5,553 Buffalo Bill Dam Modification, P-SMBP GP WY 2,797 3,547 24 3,571 Canyon Ferry Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP KS 574 510 - 510 Dickinson Unit, P-SMBP GP ND 449 564 15 579 East Bench Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP KS 3,473						1	
Bostwick Unit, P-SMBP GP NE, KS 1,266 1,098 366 1,464 Boysen Unit, P-SMB GP WY 2,084 2,410 3,143 5,553 Buffalo Bill Dam Modification, P-SMBP GP WY 2,797 3,547 24 3,571 Canyon Ferry Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP KS 574 510 - 510 Dickinson Unit, P-SMBP GP ND 449 564 15 579 East Bench Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP (Non-Rural Water) GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP KS 3,473 1,251 79 1,330 Heart Butte Unit, P-SMBP GP MT							
Boysen Unit, P-SMB GP WY 2,084 2,410 3,143 5,553 Buffalo Bill Dam Modification, P-SMBP GP WY 2,797 3,547 24 3,571 Canyon Ferry Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP KS 574 510 - 510 Dickinson Unit, P-SMBP GP ND 449 564 15 579 East Bench Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP KS 3,473 1,251 79 1,330 Heart Butte Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP MT 171 <	·						
Buffalo Bill Dam Modification, P-SMBP GP WY 2,797 3,547 24 3,571 Canyon Ferry Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP KS 574 510 - 510 Dickinson Unit, P-SMBP GP ND 449 564 15 579 East Bench Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP KS 3,473 1,251 79 1,330 Heart Butte Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP MT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102	,		_		,		
Canyon Ferry Unit, P-SMBP GP MT 5,397 5,314 15,006 20,320 Cedar Bluff Unit, P-SMBP GP KS 574 510 - 510 Dickinson Unit, P-SMBP GP ND 449 564 15 579 East Bench Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP KS 3,473 1,251 79 1,330 Heart Butte Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP MT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP KS 463 385 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Cedar Bluff Unit, P-SMBP GP KS 574 510 - 510 Dickinson Unit, P-SMBP GP ND 449 564 15 579 East Bench Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP KS 3,473 1,251 79 1,330 Heart Butte Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP MT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP WY 918 567 - 567 Kirwin Unit, P-SMBP GP MT 1,599 2,272 34							
Dickinson Unit, P-SMBP GP ND 449 564 15 579 East Bench Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP KS 3,473 1,251 79 1,330 Heart Butte Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP MT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP WY 918 567 - 567 Kirwin Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34						13,000	
East Bench Unit, P-SMBP GP MT 725 808 88 896 Frenchman-Cambridge Unit, P-SMBP GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP KS 3,473 1,251 79 1,330 Heart Butte Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP MT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP WY 918 567 - 567 Kirwin Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306	· · · · · · · · · · · · · · · · · · ·					15	
Frenchman-Cambridge Unit, P-SMBP GP NE 2,336 1,927 33 1,960 Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP KS 3,473 1,251 79 1,330 Heart Butte Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP MT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP WY 918 567 - 567 Kirwin Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306	·						
Garrison Diversion Unit, P-SMBP (Non-Rural Water) GP ND 9,840 9,717 79 9,796 Glen Elder Unit, P-SMBP GP KS 3,473 1,251 79 1,330 Heart Butte Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP MT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP WY 918 567 - 567 Kirwin Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306							
Glen Elder Unit, P-SMBP GP KS 3,473 1,251 79 1,330 Heart Butte Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP MT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP WY 918 567 - 567 Kirwin Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306					,		
Heart Butte Unit, P-SMBP GP ND 1,408 979 - 979 Helena Valley Unit, P-SMBP GP MT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP WY 918 567 - 567 Kirwin Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306							
Helena Valley Unit, P-SMBP GP MT 171 290 23 313 Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP WY 918 567 - 567 Kirwin Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306							
Kansas River Area, P-SMBP GP NE, KS 102 100 - 100 Keyhole Unit, P-SMBP GP WY 918 567 - 567 Kirwin Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306						23	
Keyhole Unit, P-SMBP GP WY 918 567 - 567 Kirwin Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306							
Kirwin Unit, P-SMBP GP KS 463 385 - 385 Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306							
Lower Marias Unit, P-SMBP GP MT 1,599 2,272 34 2,306							
	,						
	·						1,140

Logacy Posicidants Posic				FY 2019		FY 2020	
				11 2017	President's	1 1 2020	
Namowo Unit, P-SMBP		Legacy				Other Fed /	Total
Namework Int. P.SMBP	Project/Program		States	Enacted	_	1	
North Date Long Link, P.SMBP					•	-	
North Platic Area, PSMIPP						30	
Ooks Creek Unit, PSMBP							
Reprint Valley Unit, Pasciole, PSMBP			SD				-
Reprot Valley Unit, Pastole, PSMBP	Owl Creek Unit, P-SMBP	GP	WY	105	75	-	75
Riverton Unit, Pish Butter, P-SMBP		GP	SD	208		-	
Webset Dist, P.SMBP		GP	WY	588	612	-	612
Webster Unit, P-SMBP	Shadehill Unit, P-SMBP	GP	SD	619	502	-	502
Prick-Silon Missouri Basin Program (P-SMBP) subroated Navious 2.50, 00 2.425 2.428	Webster Unit, P-SMBP	GP	KS	497	17,468	-	
Power Program Services	Yellowtail Unit, P-SMBP	GP	MT	8,961		-	
Power Program Services	Pick-Sloan Missouri Basin Program (P-SMBP) subtotal			55,141	69,561	19,120	88,681
Preston Bench	U T	Bureauwide	Various	2,500		-	2,428
Provo River Project	Preston Bench	UC	ID	47	61	-	
Rapid Valley Project GP	Provo River Project		UT		2,368	870	3,238
Rapid Valley Project GP		Bureauwide	Various			-	,
Recreation and Fish and Wildlife Program Administration Bureauwide Various 6,497 3,249 - 3,239 Secarch and Development:					71	23	
Recreation and Fish and Wildlife Program Administration Bureauwide Various 6,497 3,249 - 3,239 Secarch and Development:	1 7 3	Bureauwide				-	
Research and Development:					,	-	
Desailnation and Water Purification Program Bureauwide Various 19,803 2,025 - 2,025 Science and Technology Program Bureauwide Various 16,514 11,104 - 11,1014 - 11,014 - 11,014 Science and Technology Program Bureauwide Various 16,514 11,014 - 11,014 - 11,014 Science and Technology Program Common C							,
Science and Technology Program Bureauwide Various 16.514 11.014 11.014		Bureauwide	Various	19,803	2,625	-	2,625
Rio Grande Project	Science and Technology Program	Bureauwide	Various	16,514	11,014	-	11,014
Rio Grande Project	Research and Development subtotal			36.317	13.639	_	13.639
Rio Grande Pueblos U.C. NM 3,750 68 - 68 68 68 68 69 68 69 68 62,370 5,226 68 62,370 5,226 68 68 68 68 69 68 69 68 69 69		UC	NM		,	493	
Rogue River Basin Project, Talent Division							
Eastern New Mexico Water Supply - Ute Reservoir				,		2,370	
Eastern New Mexico Water Supply - Utc Reservoir			010	2,505	2,000	2,5 , 0	5,220
Fort Peck Reservation / Dry Prairic Rural Water System		UC	NM	4,347	_	_	_
Lewis and Clark Rural Water System					2,431	_	2,431
Mni Wiconi Project						_	
Rocky Boys/North Central MT Rural Water System						_	
P-SMBP - Garrison Diversion Unit (Rural Water) GP ND 39,673 10,148 - 10,148 Rural Water Programs subtotal 132,695 27,764 - 27,764 Salt River Project LC AZ 899 899 60 959 Salton Sea Research Project LC CA 2,800 300 - 300 San Angelo Project LC CA 2,800 300 - 300 San Angelo Project LC CA 2,800 300 - 300 San Carlos Apache Tribe Water Settlement Act Project LC AZ 1,550 1,550 5,000 6,550 San Carlos Apache Tribe Water Settlement Act Project LC CA 2,950 2,950 - 2,950 San Luis Valley Project (Closed Basin Division) UC CO 2,950 2,950 - 2,950 San Luis Valley Project (Conejos Division) UC CO 50 229 - 29 San Luis Valley Project (Conejos Division) UC CO 50 229 - 2,979 Sanpete San Luis Valley Project subtotal 3,000 2,979 - 2,979 Sanpete UC UT 352 441 - 441 Shoshone Project GP WY 795 976 38 1,014 Shie Security Activities Bureauwide Various 26,220 36,359 16,616 52,975 Solano Project UC UT 797 928 - 3,395 Solano Project UC UT 797 928 - 928 Sun River Project UC UT 797 928 - 928 Sun River Project UC UT 797 928 - 928 Sun River Project UC UT 797 928 - 928 Sun River Project UC UT 797 928 - 928 Sun River Project UC NM 31 20 - 20 Tucumcari Project UC NM 31 20 - 20 Tucumcari Project UC NM 31 20 - 20 Unatilla Project UC NM 31 20 - 20 Unatilla Project UC CO 941 858 - 858 United States/Mexico Border Issues - Technical Support UC CO 436 434 - 434 W.C. Austin Project GP OK 612 542 5 547 Ventura River Project GP OK 612 542 5 547 Ventura River Project GP OK 612 542 5 547 Ventura River Project GP OK 612 542 5 547 Ventura River Project GP OK 612 542 5 547 Ventura River Project GP OK 612 542 5 547 Ventura River Project GP OK 612 5						-	
Rural Water Programs subtotal I32,695 27,764 - 27,764 Salt River Project LC AZ 899 899 60 959 Salton Sea Research Project LC CA 2,800 300 - 300 San Angelo Project GP TX 631 595 5 600 San Carlos Apache Tribe Water Settlement Act Project LC AZ 1,550 1,550 5,000 6,550 San Luis Valley Project (Closed Basin Division) UC CO 2,950 2,950 - 2,950 San Luis Valley Project (Conejos Division) UC CO 50 29 - 29 29 - 29 San Luis Valley Project (Conejos Division) UC UT CO 50 29 - 29 - 29 San Luis Valley Project (Conejos Division) UC UT T2 T79 - 79 Scoffield Project UC UT T352 441 - 441 Shoshone Project GP WY T795 976 38 1,014 Site Security Activities Bureauwide Various 26,220 36,359 16,616 52,975 Solano Project MP CA 3,696 3,395 - 3,395 Southern Arizona Water Rights Settlement Act Project UC UT T79 79 28 - 28 Sun River Project GP MT 320 505 - 505 Tualatin Project GP MT 320 505 - 505 Tualatin Project UC UT MT 320 505 - 505 Tualatin Project UC NM 31 20 - 20 Umatilla Project PN OR 3,121 3,265 138 3,403 Uncompalage Project UC Various 90 80 - 80 Uncertain Project GP OK 3,400 10,000 - 729 Ventura River Project GP OK 436 434 - 434 W.C. Austin Project GP OK 1,333 1,145 10 1,155 T10 T10	P-SMBP - Garrison Diversion Unit (Rural Water)				,	-	
Salt River Project	` '					_	
Salton Sea Research Project		LC	AZ.			60	,
San Angelo Project						-	
San Carlos Apache Tribe Water Settlement Act Project						5	
San Luis Valley Project (Closed Basin Division)							
San Luis Valley Project (Conejos Division)			CO			_	
San Luis Valley Project subtotal San Luis Valley Project subtotal UC UT 72 779 - 79						-	
Sampete				-	2 979		2 979
Scofield Project		UC	UT			_	
Shoshone Project						_	
Site Security Activities Bureauwide Various 26,220 36,359 16,616 52,975							
Solano Project	, and the second						
Southern Arizona Water Rights Settlement Act Project				-		-	
Strawberry Valley Project UC UT 797 928 - 928 Sun River Project GP MT 320 505 - 505 Tualatin Project PN OR 393 586 340 926 Tucumcari Project UC NM 31 20 - 20 Umatilla Project PN OR 3,121 3,265 138 3,403 Uncompalyere Project UC CO 941 858 - 858 United States/Mexico Border Issues - Technical Support UC CO 941 858 - 858 United States/Mexico Border Issues - Technical Support UC Various 90 80 - 80 Upper Colorado River Operations Program UC CO 1,620 729 - 729 Ventura River Project MP CA 436 434 - 434 W.C. Austin Project GP OK 612 542 5 547 </td <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>3.800</td> <td></td>					-	3.800	
Sun River Project GP MT 320 505 - 505 Tualatin Project PN OR 393 586 340 926 Tucumcari Project UC NM 31 20 - 20 Umatilla Project PN OR 3,121 3,265 138 3,403 Uncompahgre Project UC CO 941 858 - 858 United States/Mexico Border Issues - Technical Support UC CO 941 858 - 858 Upper Colorado River Operations Program UC CO 1,620 729 - 729 Ventura River Project MP CA 436 434 - 434 W.C. Austin Project GP OK 612 542 5 547 Washington Area Projects GP OK 612 542 5 547 Washira Basin Project GP OK 1,333 1,145 10 1,155	- J				928	-	-
Tualatin Project PN OR 393 586 340 926 Tucumcari Project UC NM 31 20 - 20 Umatilla Project PN OR 3,121 3,265 138 3,403 Uncompalagre Project UC CO 941 858 - 858 United States/Mexico Border Issues - Technical Support UC CO 941 858 - 85 United States/Mexico Border Issues - Technical Support UC CO 941 858 - 858 United States/Mexico Border Issues - Technical Support UC CO 941 858 - 858 United States/Mexico Border Issues - Technical Support UC CO 1,620 729 - 729 - 729 - 729 - 729 - 729 - 729 - 729 - 729 - 729 - 729 - 729 - 729 - 729 <	, , ,					-	
Tucumcari Project UC NM 31 20 - 20 Umatilla Project PN OR 3,121 3,265 138 3,403 Uncompahgre Project UC CO 941 858 - 858 United States/Mexico Border Issues - Technical Support UC CO 941 858 - 80 Upper Colorado River Operations Program UC CO 1,620 729 - 729 Ventura River Project MP CA 436 434 - 434 W.C. Austin Project GP OK 612 542 5 547 Washington Area Projects PN WA 467 465 60 525 Washita Basin Project GP OK 1,333 1,145 10 1,155 WaterSMART Program: WaterSMART Grants Bureauwide Various 34,000 10,000 - 10,000 Cooperative Watershed Management Bureauwide Various 4,179 1,750 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>340</td><td></td></t<>						340	
Umatilla Project PN OR 3,121 3,265 138 3,403 Uncompahgre Project UC CO 941 858 - 858 United States/Mexico Border Issues - Technical Support UC Various 90 80 - 80 Upper Colorado River Operations Program UC CO 1,620 729 - 729 Ventura River Project MP CA 436 434 - 434 W.C. Austin Project GP OK 612 542 5 547 Washington Area Projects PN WA 467 465 60 525 Washita Basin Project GP OK 1,333 1,145 10 1,155 WaterSMART Program: WaterSMART Grants Bureauwide Various 34,000 10,000 - 10,000 Cooperative Watershed Management Bureauwide Various 2,250 250 - 250 Water Conservation Field Services Program Bureauwide Various 58,617						-	
Uncompander Project UC CO 941 858 - 858 United States/Mexico Border Issues - Technical Support UC Various 90 80 - 80 Upper Colorado River Operations Program UC CO 1,620 729 - 729 Ventura River Project MP CA 436 434 - 434 W.C. Austin Project GP OK 612 542 5 547 Washington Area Projects PN WA 467 465 60 525 Washita Basin Project GP OK 1,333 1,145 10 1,155 WaterSMART Program: WaterSMART Grants Bureauwide Various 34,000 10,000 - 10,000 Cooperative Watershed Management Bureauwide Various 2,250 250 - 250 Water Conservation Field Services Program Bureauwide Various 58,617 3,000 - 1,750 Title XVI Water Reclamation and Reuse Projects Bureauwide Various	,					138	
United States/Mexico Border Issues - Technical Support UC Various 90 80 - 80 Upper Colorado River Operations Program UC CO 1,620 729 - 729 Ventura River Project MP CA 436 434 - 434 W.C. Austin Project GP OK 612 542 5 547 Washington Area Projects PN WA 467 465 60 525 Washita Basin Project GP OK 1,333 1,145 10 1,155 WaterSMART Program: WaterSMART Grants Bureauwide Various 34,000 10,000 - 10,000 Cooperative Watershed Management Bureauwide Various 2,250 250 - 250 Water Conservation Field Services Program Bureauwide Various 4,179 1,750 - 1,750 Title XVI Water Reclamation and Reuse Projects Bureauwide Various 58,617 3,000 - 3,000	,					-	
Upper Colorado River Operations Program UC CO 1,620 729 - 729 Ventura River Project MP CA 436 434 - 434 W.C. Austin Project GP OK 612 542 5 547 Washington Area Projects PN WA 467 465 60 525 Washita Basin Project GP OK 1,333 1,145 10 1,155 WaterSMART Program: WaterSMART Grants Bureauwide Various 34,000 10,000 - 10,000 Cooperative Watershed Management Bureauwide Various 2,250 250 - 250 Water Conservation Field Services Program Bureauwide Various 4,179 1,750 - 1,750 Title XVI Water Reclamation and Reuse Projects Bureauwide Various 58,617 3,000 - 3,000	United States/Mexico Border Issues - Technical Support	UC	Various	90		-	
Ventura River Project MP CA 436 434 - 434 W.C. Austin Project GP OK 612 542 5 547 Washington Area Projects PN WA 467 465 60 525 Washita Basin Project GP OK 1,333 1,145 10 1,155 WaterSMART Program: WaterSMART Grants WaterSMART Grants Bureauwide Various 34,000 10,000 - 10,000 Cooperative Watershed Management Bureauwide Various 2,250 250 - 250 Water Conservation Field Services Program Bureauwide Various 4,179 1,750 - 1,750 Title XVI Water Reclamation and Reuse Projects Bureauwide Various 58,617 3,000 - 3,000	11			1,620		-	
Washington Area Projects PN WA 467 465 60 525 Washita Basin Project GP OK 1,333 1,145 10 1,155 WaterSMART Program: WaterSMART Grants Bureauwide Various 34,000 10,000 - 10,000 Cooperative Watershed Management Bureauwide Various 2,250 250 - 250 Water Conservation Field Services Program Bureauwide Various 4,179 1,750 - 1,750 Title XVI Water Reclamation and Reuse Projects Bureauwide Various 58,617 3,000 - 3,000	11 0					-	
Washita Basin Project GP OK 1,333 1,145 10 1,155 WaterSMART Program: WaterSMART Grants Bureauwide Various 34,000 10,000 - 10,000 Cooperative Watershed Management Bureauwide Various 2,250 250 - 250 Water Conservation Field Services Program Bureauwide Various 4,179 1,750 - 1,750 Title XVI Water Reclamation and Reuse Projects Bureauwide Various 58,617 3,000 - 3,000	W.C. Austin Project	GP	OK	612	542	5	547
Washita Basin Project GP OK 1,333 1,145 10 1,155 WaterSMART Program: WaterSMART Grants Bureauwide Various 34,000 10,000 - 10,000 Cooperative Watershed Management Bureauwide Various 2,250 250 - 250 Water Conservation Field Services Program Bureauwide Various 4,179 1,750 - 1,750 Title XVI Water Reclamation and Reuse Projects Bureauwide Various 58,617 3,000 - 3,000	Washington Area Projects	PN	WA	467	465	60	
WaterSMART Program:WaterSMART GrantsBureauwideVarious34,00010,000-10,000Cooperative Watershed ManagementBureauwideVarious2,250250-250Water Conservation Field Services ProgramBureauwideVarious4,1791,750-1,750Title XVI Water Reclamation and Reuse ProjectsBureauwideVarious58,6173,000-3,000	Washita Basin Project	GP		1,333	1,145	10	1,155
Cooperative Watershed ManagementBureauwideVarious2,250250-250Water Conservation Field Services ProgramBureauwideVarious4,1791,750-1,750Title XVI Water Reclamation and Reuse ProjectsBureauwideVarious58,6173,000-3,000	WaterSMART Program:						
Water Conservation Field Services ProgramBureauwideVarious4,1791,750-1,750Title XVI Water Reclamation and Reuse ProjectsBureauwideVarious58,6173,000-3,000	WaterSMART Grants	Bureauwide	Various	34,000	10,000	-	10,000
Title XVI Water Reclamation and Reuse Projects Bureauwide Various 58,617 3,000 - 3,000	Cooperative Watershed Management	Bureauwide	Various	2,250	250	-	250
	Water Conservation Field Services Program	Bureauwide	Various	4,179	1,750	-	1,750
Basin Studies Bureauwide Various 5,200 2,000 - 2,000		Bureauwide	Various		3,000	-	
	Basin Studies	Bureauwide	Various	5,200	2,000	-	2,000

			FY 2019		FY 2020	
				President's		
	Legacy			Budget	Other Fed /	Total
Project/Program	Region	States	Enacted	Request	Non-Fed	Program
Drought Response and Comprehensive Drought Plans	Bureauwide	Various	9,000	2,901	-	2,901
WaterSMART Program subtotal			113,246	19,901	-	19,901
Weber Basin Project	UC	UT	2,041	2,528	-	2,528
Weber River Project	UC	UT	1,592	1,832	1,500	3,332
Wichita Project (Cheney Division)	GP	KS	736	388	5	393
Yakima Project	PN	WA	6,827	7,312	8,596	15,908
Yakima River Basin Water Enhancement Project	PN	WA	23,776	10,760	7,395	18,155
Yuma Area Projects	LC	AZ	24,761	23,914	719	24,633
Unallocated Funding (WIIN Storage Funding)			134,000	-		
Total Water and Related Resources			1,413,392	962,000	768,138	1,730,138

Bureau of Reclamation

Project/Program Crosswalk from Legacy Regions to Unified Regions

Project/Prog	ram Crosswal	lk from	Legacy Regions to Unified R	egions	
Project/Program	Legacy Region	States	Unified Region 1	Unified Region 2	Unified Region 3
Ak Chin Indian Water Rights Settlement Act Project	LC	AZ	8. Lower Colorado-Basin		
Animas-La Plata Project, Colorado River Storage Participating Project	UC	CO	7. Upper Colorado-Basin		
Arbuckle Project	GP	OK	6. Arkansas-Rio Grande-Texas-Gulf		
Balmorhea Project	UC	TX	6. Arkansas-Rio Grande-Texas-Gulf		
Boise Area Projects	PN	ID	9. Columbia-Pacific Northwest		
Cachuma Project Canadian River Project	MP GP	CA TX	10. California-Great Basin6. Arkansas-Rio Grande-Texas-Gulf		
Carlsbad Project	UC	NM	7. Upper Colorado-Basin		
Central Valley Project:		1 1111	7. Opper Colorado Basin		
American River Division, Folsom Dam Unit/Mormon Island (SOD)	MP	CA	10. California-Great Basin		
Auburn-Folsom South Unit	MP	CA	10. California-Great Basin		
Delta Division	MP	CA	10. California-Great Basin		
East Side Division Friant Division:	MP	CA	10. California-Great Basin		
Friant Division Friant Division	MP	CA	10. California-Great Basin		
San Joaquin River Restoration	MP	CA	10. California-Great Basin		
Miscellaneous Project Programs	MP	CA	10. California-Great Basin		
Replacements, Additions, and Extraordinary Maint. Program	MP	CA	10. California-Great Basin		
Sacramento River Division	MP	CA	10. California-Great Basin		
San Felipe Division	MP	CA	10. California-Great Basin		
San Joaquin Division	MP	CA	10. California-Great Basin		
Shasta Division Trinity River Division	MP MP	CA CA	10. California-Great Basin10. California-Great Basin		
Water and Power Operations	MP	CA	10. California-Great Basin		
West San Joaquin Division, San Luis Unit	MP	CA	10. California-Great Basin		
Collbran Project	UC		7. Upper Colorado-Basin		
Colorado River Activities	UC	Various	7. Upper Colorado-Basin		
Colorado River Basin Project - Central Arizona Project	LC		8. Lower Colorado-Basin		
Colorado River Basin Salinity Control Project - Title I	LC		8. Lower Colorado-Basin		
Colorado River Basin Salinity Control Project, Title II - Basinwide Prog. Colorado River Front Work and Levee System	LC LC	 	7. Upper Colorado-Basin 8. Lower Colorado-Basin		
Colorado River Front Work and Levee System Colorado River Water Quality Improvement Program	UC, LC		7. Upper Colorado-Basin	8. Lower Colorado-Basin	
Colorado-Big Thompson Project	GP	1	7. Upper Colorado-Basin	5. 25. CI Colorado Basili	
Columbia and Snake River Salmon Recovery Project	PN		9. Columbia-Pacific Northwest		
Columbia Basin Project:					
Columbia Basin Project (Ephrata)	PN		9. Columbia-Pacific Northwest		
Columbia Basin Project (Grand Coulee)	PN		9. Columbia-Pacific Northwest		
Crooked River Project Colorado River Storage Project (CRSP), Section 5	PN UC		9. Columbia-Pacific Northwest7. Upper Colorado-Basin		
Colorado River Storage Project (CRSP), Section 8	UC		7. Upper Colorado-Basin		
Dam Safety Program:		, arious	7. Opper Colorado Basin		
Department of the Interior Dam Safety Program	Bureauwide	Various			
Initiate Safety of Dams Corrective Action	Bureauwide	Various			
Safety Evaluation of Existing Dams	Bureauwide	Various			
Deschutes Project Fastern Oragon Projects	PN PN	OR OR	9. Columbia-Pacific Northwest9. Columbia-Pacific Northwest		
Eastern Oregon Projects Emergency Planning and Disaster Response Program	Bureauwide	Various			
Endangered Species Recovery Implementation Program	Bureauwide	Various			
Environmental Program Administration	Bureauwide	Various			
Examination of Existing Structures	Bureauwide	Various			
Fruitgrowers Dam Project	UC	CO	7. Upper Colorado-Basin		
Fryingpan-Arkansas Project	GP	CO	7. Upper Colorado-Basin		
General Planning Activities Grand Valley Unit, CRRSCR, Title II	Bureauwide UC	Various			
Grand Valley Unit, CRBSCP, Title II Hungry Horse Project	PN	CO MT	7. Upper Colorado-Basin9. Columbia-Pacific Northwest		
Huntley Project	GP	MT	5. Missouri-Basin		
Hyrum Project	UC	UT	7. Upper Colorado-Basin		
Indian Water Rights Settlements:			•		
Aamodt Indian Water Rights Settlement	UC		7. Upper Colorado-Basin		
Blackfeet Indian Water Rights Settlement	GP	MT	5. Missouri-Basin		
Crow Tribe Water Rights Settlement Navaio Gallup Water Supply	GP UC	+	5. Missouri-Basin 7. Upper Colorado-Basin		
Navajo Gallup Water Supply Taos Pueblo Indian Water Rights Settlement	UC		7. Upper Colorado-Basin7. Upper Colorado-Basin		
Kendrick Project	GP	WY	7. Upper Colorado-Basin		
Klamath Project	MP	OR	10. California-Great Basin		
Lahontan Basin Project (Humbolt, Newlands, and Washoe Projects)	MP	NV	10. California-Great Basin		
Lake Mead/Las Vegas Wash Program	LC	NV	8. Lower Colorado-Basin		
Lake Tahoe Regional Development Program	MP	Various	10. California-Great Basin		
Land Resources Management Program Leadville/Arkansas River Recovery Project	Bureauwide GP	Various CO	7. Upper Colorado-Basin		
Lewiston Orchards Project	PN	ID	9. Columbia-Pacific Northwest		
Lower Colorado River Operations Program	LC		8. Lower Colorado-Basin		
Lower Rio Grande Water Conservation Project	GP	TX	6. Arkansas-Rio Grande-Texas-Gulf		
Lower Yellowstone Project	GP	ND	5. Missouri-Basin		
		CO	7. Upper Colorado-Basin		
•	UC	OT?	16 0 m =		
McGee Creek Project	GP		6. Arkansas-Rio Grande-Texas-Gulf 5. Missouri-Basin		
McGee Creek Project Mid-Dakota Rural Water Project	GP GP	SD	5. Missouri-Basin		
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project	GP	SD			
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division	GP GP UC	SD NM	5. Missouri-Basin7. Upper Colorado-Basin		
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division Minidoka Area Projects	GP GP UC GP	SD NM MT	5. Missouri-Basin7. Upper Colorado-Basin5. Missouri-Basin		
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division Minidoka Area Projects Mirage Flats Project Miscellaneous Flood Control Operations	GP GP UC GP PN GP Bureauwide	SD NM MT ID NE Various	 5. Missouri-Basin 7. Upper Colorado-Basin 5. Missouri-Basin 9. Columbia-Pacific Northwest 5. Missouri-Basin 		
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division Minidoka Area Projects Mirage Flats Project Miscellaneous Flood Control Operations Moon Lake Project	GP GP UC GP PN GP Bureauwide UC	SD NM MT ID NE Various UT	 5. Missouri-Basin 7. Upper Colorado-Basin 5. Missouri-Basin 9. Columbia-Pacific Northwest 5. Missouri-Basin 7. Upper Colorado-Basin 		
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division Minidoka Area Projects Mirage Flats Project Miscellaneous Flood Control Operations Moon Lake Project Mountain Park Project	GP GP UC GP PN GP Bureauwide UC GP	SD NM MT ID NE Various UT OK	 Missouri-Basin Upper Colorado-Basin Missouri-Basin Columbia-Pacific Northwest Missouri-Basin Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf 		
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division Minidoka Area Projects Mirage Flats Project Miscellaneous Flood Control Operations Moon Lake Project Mountain Park Project Native American Affairs Program	GP GP UC GP PN GP Bureauwide UC GP Bureauwide	SD NM MT ID NE Various UT OK Various	 Missouri-Basin Upper Colorado-Basin Missouri-Basin Columbia-Pacific Northwest Missouri-Basin Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf 		
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division Minidoka Area Projects Mirage Flats Project Miscellaneous Flood Control Operations Moon Lake Project Mountain Park Project Native American Affairs Program Negotiation and Administration of Water Marketing	GP GP UC GP PN GP Bureauwide UC GP Bureauwide Bureauwide	SD NM MT ID NE Various UT OK Various Various	 Missouri-Basin Upper Colorado-Basin Missouri-Basin Columbia-Pacific Northwest Missouri-Basin Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf 		
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division Minidoka Area Projects Mirage Flats Project Miscellaneous Flood Control Operations Moon Lake Project Mountain Park Project Native American Affairs Program Negotiation and Administration of Water Marketing Newton Project	GP GP UC GP PN GP Bureauwide UC GP Bureauwide	SD NM MT ID NE Various UT OK Various	 Missouri-Basin Upper Colorado-Basin Missouri-Basin Columbia-Pacific Northwest Missouri-Basin Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf 		
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division Minidoka Area Projects Mirage Flats Project Miscellaneous Flood Control Operations Moon Lake Project Mountain Park Project Native American Affairs Program Negotiation and Administration of Water Marketing Newton Project Norman Project North Platte Project	GP GP UC GP PN GP Bureauwide UC GP Bureauwide UC GP Bureauwide UC GP GP GP GP	SD NM MT ID NE Various UT OK Various Various UT OK WY	 Missouri-Basin Upper Colorado-Basin Missouri-Basin Columbia-Pacific Northwest Missouri-Basin Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf Upper Colorado-Basin 		
Mancos Project McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division Minidoka Area Projects Mirage Flats Project Miscellaneous Flood Control Operations Moon Lake Project Mountain Park Project Native American Affairs Program Negotiation and Administration of Water Marketing Newton Project Norman Project North Platte Project Nueces River Project	GP GP UC GP PN GP Bureauwide UC GP Bureauwide UC GP Bureauwide UC GP GP GP GP	SD NM MT ID NE Various UT OK Various Various UT OK TA VARIOUS	 Missouri-Basin Upper Colorado-Basin Missouri-Basin Columbia-Pacific Northwest Missouri-Basin Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf 		
McGee Creek Project Mid-Dakota Rural Water Project Middle Rio Grande Project Milk River Project/St. Mary Storage Division Minidoka Area Projects Mirage Flats Project Miscellaneous Flood Control Operations Moon Lake Project Mountain Park Project Native American Affairs Program Negotiation and Administration of Water Marketing Newton Project Norman Project North Platte Project	GP GP UC GP PN GP Bureauwide UC GP Bureauwide UC GP Bureauwide UC GP GP GP GP	SD NM MT ID NE Various UT OK Various Various UT OK WY	 Missouri-Basin Upper Colorado-Basin Missouri-Basin Columbia-Pacific Northwest Missouri-Basin Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf Upper Colorado-Basin Arkansas-Rio Grande-Texas-Gulf Upper Colorado-Basin 		

Project/Program	Legacy Region States	Unified Region 1	Unified Region 2	Unified Region 3
Paradox Valley Unit, CRBSCP, Title II	UC CO	7. Upper Colorado-Basin	emiled Region 2	
Parker-Davis Project	LC Various	8. Lower Colorado-Basin		
Pine River Project Pick-Sloan Missouri Basin Program (P-SMBP):	UC CO	7. Upper Colorado-Basin		
Ainsworth Unit, P-SMBP	GP NE	5. Missouri-Basin		
Almena Unit, P-SMBP	GP KS	5. Missouri-Basin		
Angostura Unit, P-SMBP Armel Unit, P-SMBP	GP SD GP CO	5. Missouri-Basin5. Missouri-Basin		
Belle Fourche Unit, P-SMBP	GP SD	5. Missouri-Basin		
Bostwick Unit, P-SMBP	· · · · · ·	5. Missouri-Basin		
Boysen Unit, P-SMB Buffalo Bill Dam Modification, P-SMBP	GP WY GP WY	7. Upper Colorado-Basin7. Upper Colorado-Basin		
Canyon Ferry Unit, P-SMBP	GP MT	5. Missouri-Basin		
Cedar Bluff Unit, P-SMBP	GP KS GP ND	5. Missouri-Basin		
Dickinson Unit, P-SMBP East Bench Unit, P-SMBP	GP ND GP MT	5. Missouri-Basin5. Missouri-Basin		
Frenchman-Cambridge Unit, P-SMBP	GP NE	5. Missouri-Basin		
Garrison Diversion Unit, P-SMBP (Non-Rural Water) Glen Elder Unit, P-SMBP	GP ND GP KS	5. Missouri-Basin5. Missouri-Basin		
Heart Butte Unit, P-SMBP	GP ND	5. Missouri-Basin		
Helena Valley Unit, P-SMBP		5. Missouri-Basin		
Kansas River Area, P-SMBP		5. Missouri-Basin		
Keyhole Unit, P-SMBP Kirwin Unit, P-SMBP		5. Missouri-Basin5. Missouri-Basin		
Lower Marias Unit, P-SMBP	GP MT	5. Missouri-Basin		
Missouri Basin O&M, P-SMBP		5. Missouri-Basin 7. Upper Colorado-Basin	7. Upper Colorado-Basin	6. Arkansas-Rio Grande-Texas-Gulf
Narrows Unit, P-SMBP North Loup Unit, P-SMBP	GP CO GP NE	7. Upper Colorado-Basin5. Missouri-Basin		
North Platte Area, P-SMBP	GP WY	7. Upper Colorado-Basin		
Oahe Unit, P-SMBP	GP SD GP WY	5. Missouri-Basin 7. Upper Colorado, Basin		
Owl Creek Unit, P-SMBP Rapid Valley Unit, Pactola, P-SMBP	GP WY GP SD	7. Upper Colorado-Basin5. Missouri-Basin		
Riverton Unit, Pilot Butte, P-SMBP	GP WY	7. Upper Colorado-Basin		
Shadehill Unit, P-SMBP	GP SD GP KS	5. Missouri-Basin		
Webster Unit, P-SMBP Yellowtail Unit, P-SMBP	GP KS GP MT	5. Missouri-Basin5. Missouri-Basin		
Power Program Services	Bureauwide Various			
Preston Bench	UC ID	7. Upper Colorado-Basin		
Provo River Project Public Access and Safety Program	UC UT Bureauwide Various	7. Upper Colorado-Basin		
Rapid Valley Project	GP SD	5. Missouri-Basin		
Reclamation Law Administration Recreation and Fish and Wildlife Program Administration	Bureauwide Various			
Recreation and Fish and Wildlife Program Administration Research and Development:	Bureauwide Various			
Desalination and Water Purification Program.	Bureauwide Various			
Science and Technology Program Rio Grande Project	Bureauwide Various UC NM	7. Upper Colorado-Basin		
Rio Grande Pueblos	UC NM	7. Upper Colorado-Basin 7. Upper Colorado-Basin		
Rogue River Basin Project, Talent Division	PN OR	9. Columbia-Pacific Northwest		
Rural Water Programs: Eastern New Mexico Water Supply - Ute Reservoir	UC NM	7. Upper Colorado-Basin		
Fort Peck Reservation / Dry Prairie Rural Water System	GP MT	5. Missouri-Basin		
Lewis and Clark Rural Water System		5. Missouri-Basin	3. Great Lakes	4. Mississippi-Basin
Mni Wiconi Project Rocky Boys/North Central MT Rural Water System	GP SD GP MT	5. Missouri-Basin5. Missouri-Basin		
P-SMBP - Garrison Diversion Unit (Rural Water)	GP ND	5. Missouri-Basin		
Salt River Project	LC AZ	8. Lower Colorado-Basin		
Salton Sea Research Project San Angelo Project	LC CA GP TX	8. Lower Colorado-Basin6. Arkansas-Rio Grande-Texas-Gulf		
San Carlos Apache Tribe Water Settlement Act Project	LC AZ	8. Lower Colorado-Basin		
San Luis Valley Project (Closed Dagin Division)	110 00			
San Luis Valley Project (Closed Basin Division)	UC CO	7. Upper Colorado-Basin		
San Luis Valley Project (Conejos Division)	UC CO	7. Upper Colorado-Basin		
		11		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project	UC CO UC UT UC UT GP WY	7. Upper Colorado-Basin7. Upper Colorado-Basin7. Upper Colorado-Basin7. Upper Colorado-Basin7. Upper Colorado-Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project	UC CO UC UT UC UT	7. Upper Colorado-Basin7. Upper Colorado-Basin7. Upper Colorado-Basin7. Upper Colorado-Basin7. Upper Colorado-Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project	UC CO UC UT UC UT GP WY Bureauwide Various MP CA LC AZ	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 8. Lower Colorado-Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project	UC CO UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project	UC CO UC UT UC UT GP WY Bureauwide Various MP CA LC AZ	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 8. Lower Colorado-Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project	UC CO UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project	UC CO UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project	UC CO UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC CO	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 5. Missouri-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program	UC CO UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC CO UC Various UC CO	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project	UC CO UT UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC CO UC CO UC CO MP CA	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 5. Missouri-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 10. California-Great Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program	UC CO UT UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC CO UC CO UC CO MP CA	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project W.C. Austin Project Washington Area Projects Washita Basin Project	UC CO UT UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC CO UC CO UC CO MP CA	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 10. California-Great Basin 6. Arkansas-Rio Grande-Texas-Gulf		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project W.C. Austin Project Washington Area Projects Washita Basin Project WaterSMART Program:	UC CO UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC CO UC Various UC CO MP CA GP OK PN WA GP OK	 Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin Lower Colorado-Basin Upper Colorado-Basin Missouri-Basin Columbia-Pacific Northwest Upper Colorado-Basin Columbia-Pacific Northwest Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin California-Great Basin Arkansas-Rio Grande-Texas-Gulf Columbia-Pacific Northwest Arkansas-Rio Grande-Texas-Gulf 		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project W.C. Austin Project Washington Area Projects Washita Basin Project	UC CO UC UT UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC Various UC CO MP CA	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 5. Missouri-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 6. Arkansas-Rio Grande-Texas-Gulf 9. Columbia-Pacific Northwest 6. Arkansas-Rio Grande-Texas-Gulf		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project W.C. Austin Project Washington Area Projects Washita Basin Project WaterSMART Program: WaterSMART Grants Cooperative Watershed Management Water Conservation Field Services Program	UC UT UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC Various UC CO MP CA GP OK PN WA GP OK Bureauwide Various Bureauwide Various Bureauwide Various	 Upper Colorado-Basin Missouri-Basin Columbia-Pacific Northwest Upper Colorado-Basin Columbia-Pacific Northwest Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin California-Great Basin Arkansas-Rio Grande-Texas-Gulf Columbia-Pacific Northwest Arkansas-Rio Grande-Texas-Gulf 		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tualatin Project Umatilla Project Umatilla Project Uncompangre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project W.C. Austin Project Washington Area Projects Washita Basin Project WaterSMART Program: WaterSMART Grants Cooperative Watershed Management Water Conservation Field Services Program Title XVI Water Reclamation and Reuse Projects	UC UT UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC Various UC CO HC CO MP CA GP OK PN WA GP OK Bureauwide Various Bureauwide Various Bureauwide Various Bureauwide Various Bureauwide Various	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 5. Missouri-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 6. Arkansas-Rio Grande-Texas-Gulf 9. Columbia-Pacific Northwest 6. Arkansas-Rio Grande-Texas-Gulf		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tualatin Project Tucumcari Project Umatilla Project Unnompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project W.C. Austin Project Washington Area Projects Washita Basin Project WaterSMART Grants Cooperative Watershed Management Water Conservation Field Services Program Title XVI Water Reclamation and Reuse Projects Basin Studies	UC UT UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC Various UC CO MP CA GP OK PN WA GP OK Bureauwide Various Bureauwide Various Bureauwide Various	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 5. Missouri-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 6. Arkansas-Rio Grande-Texas-Gulf 9. Columbia-Pacific Northwest 6. Arkansas-Rio Grande-Texas-Gulf		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tualatin Project Umatilla Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project W.C. Austin Project Washington Area Projects Washita Basin Project WaterSMART Grants Cooperative Watershed Management Water Conservation Field Services Program Title XVI Water Reclamation and Reuse Projects Basin Studies Drought Response and Comprehensive Drought Plans Weber Basin Project	UC UT UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC Various UC CO MP CA GP OK PN WA GP OK Bureauwide Various	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 5. Missouri-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 6. Arkansas-Rio Grande-Texas-Gulf 9. Columbia-Pacific Northwest 6. Arkansas-Rio Grande-Texas-Gulf		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project W.C. Austin Project Washington Area Projects Washita Basin Project WaterSMART Program: WaterSMART Grants Cooperative Watershed Management Water Conservation Field Services Program Title XVI Water Reclamation and Reuse Projects Basin Studies Drought Response and Comprehensive Drought Plans Weber Basin Project	UC UT UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC Various UC CO MP CA GP OK PN WA GP OK Bureauwide Various	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 6. Arkansas-Rio Grande-Texas-Gulf 9. Columbia-Pacific Northwest 6. Arkansas-Rio Grande-Texas-Gulf 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project W.C. Austin Project Washington Area Projects WaterSMART Program: WaterSMART Grants Cooperative Watershed Management Water Conservation Field Services Program Title XVI Water Reclamation and Reuse Projects Basin Studies Drought Response and Comprehensive Drought Plans Weber Basin Project Weber River Project Wichita Project (Cheney Division)	UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC NM PN OR UC CO UC Various UC CO MP CA GP OK PN WA GP OK Bureauwide Various	7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 8. Lower Colorado-Basin 7. Upper Colorado-Basin 5. Missouri-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 9. Columbia-Pacific Northwest 7. Upper Colorado-Basin 7. Upper Colorado-Basin 7. Upper Colorado-Basin 10. California-Great Basin 6. Arkansas-Rio Grande-Texas-Gulf 9. Columbia-Pacific Northwest 6. Arkansas-Rio Grande-Texas-Gulf		
San Luis Valley Project (Conejos Division) Sanpete Scofield Project Shoshone Project Site Security Activities Solano Project Southern Arizona Water Rights Settlement Act Project Strawberry Valley Project Sun River Project Tualatin Project Tucumcari Project Umatilla Project Uncompahgre Project United States/Mexico Border Issues - Technical Support Upper Colorado River Operations Program Ventura River Project W.C. Austin Project Washington Area Projects Washita Basin Project WaterSMART Program: WaterSMART Grants Cooperative Watershed Management Water Conservation Field Services Program Title XVI Water Reclamation and Reuse Projects Basin Studies Drought Response and Comprehensive Drought Plans Weber Basin Project	UC UT UC UT UC UT UC UT GP WY Bureauwide Various MP CA LC AZ UC UT GP MT PN OR UC NM PN OR UC CO UC Various UC CO UC Various UC CO MP CA GP OK PN WA GP OK Bureauwide Various	 Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin Lower Colorado-Basin Upper Colorado-Basin Missouri-Basin Columbia-Pacific Northwest Upper Colorado-Basin Columbia-Pacific Northwest Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin Upper Colorado-Basin California-Great Basin Arkansas-Rio Grande-Texas-Gulf Columbia-Pacific Northwest Arkansas-Rio Grande-Texas-Gulf Tolumbia-Pacific Northwest Arkansas-Rio Grande-Texas-Gulf Missouri-Basin Missouri-Basin 		

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: Title VI of the Claims Resolution Act of 2010 (P.L. 111-291) (Act) authorizes: (1) the Aamodt Litigation Settlement Agreement; (2) construction of the Pojoaque Basin Regional Water System (PBRWS); (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 PBRWS. The Act authorized the Secretary of the Interior to provide funding to accomplish specific tasks, including Operations and Maintenance (O&M) of the PBRWS while it is under construction. Reclamation's financial responsibility is not to exceed \$106.4 million (October 2006 level) to plan, design, and construct the PBRWS in accordance with the Aamodt Litigation Settlement Act, and \$5 million for O&M of the PBRWS during construction. The PBRWS 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 PBRWS is \$106.4 million in October 2006 dollars, subject to indexing. The PBRWS 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$8,301,000	\$8,301,000
Request	\$8,301,000	\$8,301,000
Non-Federal	\$11,583,000	\$12,558,000
Prior Year Funds	\$0	\$0
Total Program	\$19,884,000	\$20,859,000
Prior Year Funds/Non-Federal	(\$11,583,000)	(\$12,558,000)
Total Reclamation Allotment	\$8,301,000	\$8,301,000

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 Act and the Cost-Sharing and System Integration Agreement.

Total Cost Information*

	Total Estimated Cost ^{1/}	Total to 9/30/18 ^{2/}	FY 2019 Enacted	FY 2020 President's Budget	Balance to Complete ^{1/}
Reclamation	\$65,287,000	\$37,266,993	\$8,301,000	\$9,000,000	\$10,719,007
Mandatory ^{2/}	\$73,100,000	\$56,400,000	\$0	\$0	\$16,700,000
Non-Federal	\$92,100,000	\$19,110,669	\$11,583,000	\$12,558,000	\$48,848,331
Total	\$230,487,000	\$112,777,662	\$19,884,000	\$21,558,000	\$76,267,338

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

Construction Cost Allocation and Methodology

Allocation	FY 2019 ^{1/}	FY 2020 ^{1/}
Municipal & Industrial Water	\$230,487,000	\$230,487,000

¹/ As of October 2017.

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: For Reclamation, the total appropriation ceiling at the October 2006 price level is \$106.4 million. This funding shall be adjusted annually to account for increases in construction costs, using applicable engineering indices, and shall remain available until expended. The Act stipulates that the mandatory funding of \$56.4 million shall be adjusted for the period of fiscal years 2011 through 2016. Appropriated funding of \$50.0 million is authorized to be adjusted for the period of fiscal years 2011 through 2024. State and county funds shall also be indexed and adjusted consistent with the Federal appropriations for construction costs. The costs reflected in the above tables have been indexed as of October 2017. These amounts include both the Federal and non-Federal share of project costs.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues oversight, management, coordination, partnering, and construction on the PBRWS source water intake system, water treatment plant and transmission and distribution systems for Pueblo de San Ildefonso and northern portions of the Pueblo of Pojoaque. Continues design and specification development for facilities to be constructed using the design-bid-build process, as well as oversight, coordination, public education and outreach. Continues acquisition of land interests for facilities; permitting activities to comply with the Clean Water Act required for project construction; activities in support of compliance for the National Historic

^{1/} Indexed to October 2017.

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 2012-2019 discretionary funding was appropriated in the Water and Related Resources account.

Aamodt Litigation Settlement Act

Preservation Act; the cultural resources consultation process with Native American Tribes pursuant to the Programmatic Agreement; cultural resources treatment and mitigation in advance of construction contracts; and cultural resources monitoring work on active construction contracts. Continues activities in support of fish and wildlife protection commitments associated with the Endangered Species Act, NEPA, and other Federal, State, and Tribal programs. Mandatory funding is available until expended, and will be utilized to supplement appropriations in FY 2020. \$20,859,000

Non-Federal (State of New Mexico, County of Santa Fe) (\$12,558,000)

Subtotal, Water and Energy Management and Development

\$8,301,000

Reclamation Request

\$8,301,000

Ak-Chin Indian Water Rights Settlement Act Project

LOCATION: Ak-Chin Indian Reservation, Pinal County, Arizona.

DESCRIPTION/JUSTIFICATION: The Ak-Chin Settlement Act (Act) provides for the delivery of approximately 85,000 acre-feet 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 Indian Community (Community) and if deliveries are not made then damages are required to be paid. The Central Arizona Water Conservation District (CAWCD) establishes the water rates for the delivery of water through the CAP. These water rates are steadily climbing due to operation and maintenance costs, as well as power costs. In 2017, the Federal rate was \$164 per acre-foot with this rate increasing to \$178 per acre-foot in 2019. If the first 10,000 acre-feet are not delivered, the Secretary is required to pay damages measured by the replacement cost of undelivered water increased by an additive calculation. If the second 75,000 acre-feet of the Community water order is not delivered, the Secretary is required to pay damages measured by the replacement cost of undelivered water. The Community may also file claims and lawsuits for other losses.

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 2000, 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$16,200,000	\$15,311,000
Request	\$16,200,000	\$15,311,000
Non-Federal	\$0	\$0
Prior Year Funds	\$953	\$0
Total Program	\$16,200,953	\$15,311,000
Prior Year Funds/Non-Federal	(\$953)	(\$0)
Total Reclamation Allotment	\$16,200,000	\$15,311,000

WORK PROPOSED IN FY 2020:

Facility Operations - Continues payment for the delivery 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. Less funding is required due to lower CAWCD water rates for FY 2020.

Reclamation Request

\$15,311,000

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 (ALP) Project. Features of the project are Ridges Basin Dam and Lake Nighthorse; Durango Pumping Plant; Ridges Basin Inlet Conduit; and Navajo Nation Municipal Pipeline (NNMP). This request includes funding for continued life cycle O&M for the facilities as well as for 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 19, 2005; P.L. 109-148, Department of Defense Appropriations Act, 2006, December 30, 2005. (In addition, Reclamation is proposing the following legislative language for FY 2020, in order to ensure appropriate authorization for the completion of this project. Animas-La Plata Deferred Construction Funding. – There is hereby authorized to be appropriated the total amount of \$4,000,000 for one payment to provide deferred construction funding to the Navajo Nation for the purpose of fulfilling the construction obligations as described in section 15(b) of the Colorado Ute Indian Water Rights Settlement Act of 1988 (Public Law 100-585), as amended by the Colorado Ute Settlement Act Amendments of 2000 (Public Law 106-554), and to complete the commissioning and title transfer of the Navajo Nation Municipal Pipeline.)

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Number of Threatened or Endangered species recovery activities implemented

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$174,000	\$4,225,000
Land Management and Development	\$205,000	\$200,000
Fish and Wildlife Management and Development	\$233,000	\$809,000
Facility Operations	\$2,000,000	\$2,100,000
Facility Maintenance and Rehabilitation	\$185,000	\$2,904,000
Request	\$2,797,000	\$10,238,000
Non-Federal	\$0	\$0
Prior Year Funds	\$188,238	\$0
Total Program	\$2,985,238	\$10,238,000
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	(\$188,238)	\$0
Total Reclamation Allotment	\$2,797,000	\$10,238,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Work to be Performed with Construction Funding:

Pending enactment of proposed legislation, begins and completes funding for the deferred construction of future storage needs for the NNMP. The timing for the construction of the total volume of storage authorized for the NNMP is dependent upon future population growth. Work will also continue to complete the commissioning of the NNMP. Increase is due to completing the Federal construction obligation to the Navajo Nation under the authorizing legislation for the deferred construction of water storage tanks and to complete the commissioning of the NNMP and transfer stipulations for title transfer to the Navajo Tribal Utility Authority.

\$4,000,000

Work to be Performed with Non-Construction Funding:

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.

\$225,000

Subtotal, Water and Energy Management and Development

\$4,225,000

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.

\$200,000

Fish and Wildlife Management and Development - Continues trout stocking and other wildlife management and monitoring tasks. Increase is due to additional work and contracts associated with

required environmental and cultural resource compliance and Aquatic Nuisance Species. Additional funding for compliance with the 2017 ALP Operations and Maintenance Programmatic Agreement which requires on-going survey and monitoring of archaeological sites in the ALP project area. Additional tasks include noxious weed management for Ridges Basin and the ALP mitigation lands, on-going cultural surveys of the mitigation lands, and inspections for Quagga and Zebra Mussel control at Lake Nighthorse. \$809,000

Facility Operations - Continues guidance to Animas-La Plata Operation, Maintenance, and Replacement Association, and O&M for the project features that includes 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.

\$2,100,000

Facility Maintenance and Rehabilitation - Continues replacement of the Obermeyer Gates. 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 the costs associated with the replacement of the Obermeyer Gates at the Durango Pumping Plant. \$2,904,000

Reclamation Request

\$10,238,000

SEE APPENDIX FOR: Benefit Cost Ratios

Land Certification

Obligations by Function for Operating Projects

Project Repayment

Status of Water Service and Repayment Contracts

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 feature of the project is Arbuckle Dam which impounds water in the Lake of the Arbuckle. The project is operated by the Arbuckle Master Conservancy District and provides municipal and industrial water to the Cities of Davis, Ardmore, and Wynnewood, and to the Wynnewood oil and gas refinery.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019	FY 2020
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$66,000	\$39,000
Facility Operations	\$178,000	\$198,000
Facility Maintenance and Rehabilitation	\$5,000	\$5,000
Enacted/Request	\$249,000	\$242,000
Non-Federal	\$9,000	\$5,000
Prior Year Funds	\$0	\$0
Total Program	\$258,000	\$247,000
Prior Year Funds/Non-Federal	(\$9,000)	(\$5,000)
Total Reclamation Allotment	\$249,000	\$242,000

WORK PROPOSED FOR FY 2020:

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. Less funding is requested due to fewer contract compliance review requirements in FY 2020. \$44,000

Non-Federal - Arbuckle Master Conservancy District

(\$5,000)

Subtotal, Water and Energy Management and Development

\$39,000

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. \$198,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspection. \$5,000

Reclamation Request \$242,000

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 formerly conveyed supplemental irrigation water to approximately 10,600 acres of farmland near the town of Balmorhea, Texas. The average annual water that use to be delivered was about 31,800 acre-feet. The project has not produced water in almost 20 years. 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 was 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. Groundwater in the area has lowered. As a result, the project no longer supplies irrigation water, and Reclamation's involvement will be reduced.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management for adaptation to environmental changes

Measure: Number of Threatened or Endangered species recovery activities implemented

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Land Management and Development	\$0	\$10,000
Fish and Wildlife Management and Development	\$37,000	\$12,000
Facility Operations	\$13,000	\$10,000
Request	\$50,000	\$32,000
Non-Federal	\$0	\$0
Prior Year Funds	\$4,205	\$0
Total Program	\$54,205	\$32,000
Prior Year Funds/Non-Federal	(\$4,205)	\$0
Total Reclamation Allotment	\$50,000	\$32,000

WORK PROPOSED FOR FY 2020:

Land Management and Development - Begins process of reducing Reclamation's involvement in the Balmorhea Project. As the groundwater has lowered, the project no longer supplies irrigation water to the district, which it had been providing for the past twenty years. This is to include disposal of acquired lands and all easements and assets related to the Project will be released to the Reaves County Irrigation District.

\$10,000

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. Less funding is requested due to the discontinuance of a maintenance contract that is now being managed and conducted by Reclamation staff.

Facility Operations - Continues required lifecycle water operations and maintenance of the Phantom Lake Spring located at Balmorhea, Texas. \$10,000

Reclamation Request \$32,000

Blackfeet Water Rights Settlement Act

LOCATION: The Blackfeet Indian Reservation is located in northwestern Montana, bordered by Glacier National Park and the Lewis and Clark National Forest to the west, and Canada to the north. The reservation is approximately 120 miles northwest of Great Falls, Montana.

DESCRIPTION/JUSTIFICATION: The "Blackfeet Water Rights Settlement Act" (Act), Title III, Subtitle G of the Water Infrastructure Improvements for the Nation Act of 2016 (P. L. 114-322), was signed into law on December 16, 2016, as amended. A total of \$246.5 million in discretionary funds is authorized for the Bureau of Reclamation (Reclamation) to implement various components of the Act. The Act authorizes Reclamation to implement multiple construction components, including:

- 1. Blackfeet Irrigation Project (BIP) Deferred Maintenance, Four Horns Dam Safety and Enhancement Improvements, and Export Facilities. The Act authorizes Reclamation to carry out the following activities relating to the BIP; 1) Deferred maintenance, 2) Dam safety improvements for Four Horns Dam, and 3) Rehabilitation and enhancement of the Four Horns Feeder Canal, Dam, and Reservoir. The scope is generally described in the document entitled, "Engineering Evaluation and Condition Assessment, Blackfeet Irrigation Project", prepared by DOWL HKM Engineering, dated August 2007; the provisions relating to Four Horns Rehabilitated Dam of the document entitled, "Four Horns Dam Enlarged Appraisal Evaluation Design Report", prepared by DOWL HKM Engineering, dated April 2007, and the document, "Four Horns Feeder Canal Rehabilitation with Export", prepared by DOWL HKM Engineering, dated April 2013, subject to the condition that, before commencing construction activities, the Secretary of the Interior (Secretary) will review the design of the proposed rehabilitation, or improvement, and perform value engineering analyses.
- 2. **Design and Construction of the Municipal, Rural and Industrial (MR&I) System and Water Storage and Irrigation Facilities.** The Act authorizes Reclamation to plan, design and construct the water diversion and delivery features of the MR&I System as generally described in the document entitled, "Blackfeet Regional Water System", prepared by DOWL HKM Engineering, dated June 2010 and modified by DOWL HKM Engineering in the addendum to the report, dated March 2013. This is subject to the condition that, before commencing construction activities, the Secretary will review the design of the proposed MR&I System and perform value engineering analyses.

The Act authorizes Reclamation to plan, design and construct one or more facilities to store water and support irrigation on the Blackfeet Reservation as generally described in the document entitled, "Blackfeet Water Storage, Development, and Project Report", prepared by DOWL HKM, dated March 13, 2013. This is subject to the condition that, before commencing construction activities, the Secretary will review the design of the proposed facilities and perform value engineering analyses.

3. **Reclamation Activities to Improve Water Management.** The Act authorizes Reclamation to conduct several studies and enter into agreements with the Blackfeet Tribe to resolve long-standing water and water-related management issues, as well as provide for construction of stream-restoration measures on Swiftcurrent Creek. The studies include a water supply appraisal study for the St. Mary and Milk River basins; a feasibility study to evaluate alternatives for the rehabilitation of the St. Mary Diversion Dam and Canal, and to increase storage in Fresno Dam and Reservoir; and a cost

allocation study based on the Milk River Project's authorized purposes. The Act authorizes Reclamation to plan, design and construct the Swiftcurrent Creek Bank Stabilization Project as described in the document entitled, "Boulder/Swiftcurrent Creek Stabilization Project, Phase II Investigation Report", prepared by DOWL HKM Engineering, dated March 2012. The Act also authorizes the Secretary to provide funds to the Blackfeet and Fort Belknap Tribes to assist with entering into an agreement to provide for the exercise of the two Tribes' respective water rights on the Milk River.

AUTHORIZATION: The Blackfeet Water Rights Settlement Act, Title III, Subtitle G of the Water Infrastructure Improvements for the Nation Act of 2016 (P.L 114-322); and the American Water Infrastructure Act of 2018, Section 4311 (P.L 115-270).

COMPLETION DATA: Pursuant to the required activities found in P.L. 114-322, Section 3723, if the Secretary fails to publish a statement of findings under section 3720(f) by not later than January 21, 2025, the Act expires effective on January 22, 2025. Section 3720(f) defines the conditions for finding the enforceability date has been met, one of which is a requirement that all authorized funding for Reclamation and the Bureau of Indian Affairs (BIA) must be fully appropriated. There is provision in section 3723 for extending the expiration date upon mutual agreement by the Secretary and the Tribe.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$18,000,000	\$10,000,000
Request	\$18,000,000	\$10,000,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$18,000,000	\$10,000,000
Prior Year Funds/Non-Federal	\$ 0	\$ 0
Total Reclamation Allotment	\$18,000,000	\$10,000,000

Total Cost Information^{1/2/}

	Total Estimated Cost	Total to 9/30/18	FY 2019	FY 2020	Balance to Complete
Reclamation	\$246,500,000	\$16,500,000	\$18,000,000	\$10,000,000	\$202,000,000
Non-Federal	\$0	\$0	\$0	\$0	\$0
Total	\$246,500,000	\$16,500,000	\$18,000,000	\$10,000,000	\$202,000,000

¹/ Includes costs associated with the authorized appropriation ceiling as of April 2010. Indexing is authorized, adjusted annually to reflect changes since April 2010 in the Bureau of Reclamation Construction Cost Trends Index applicable to the types of construction involved. Total Cost Information table reflects costs attributable to Reclamation and does not include costs attributable to the Bureau of Indian Affairs of \$175,460,000 or the State of Montana of \$20,000,000.

METHODOLOGY: Authorizing legislation establishes costs at April 2010 price level and indexing of costs is pending.

APPROPRIATION CEILING: The Act authorizes the appropriation of discretionary funding of \$246,500,000 as of April 2010. Since this is a new project, there has been no work performed or funds expended to date. The ceiling has not been indexed.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development – Continues coordination with the Tribe regarding resolution of Reclamation's right-of-way on the St. Mary Unit Milk River project. Continues planning, design and construction for the Blackfeet Irrigation Project Deferred Maintenance, Four Horns Dam Safety and Enhancement Improvements, and Export Facilities. Continues valve engineering studies for the Water Storage and Irrigation projects and initiates studies.

Reclamation Request

\$10,000,000

² FY 2019 included congressional funding provided in the Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, 2019 (P.L. 115-244).

Boise Area Projects

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

DESCRIPTION/JUSTIFICATION: The Boise Project is separated into the Arrowrock and Payette Divisions, annually providing about 1.2 million acre-feet of irrigation water for about 377,000 acres. The project consists 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 53.3 megawatts and an average annual generation of about 195 million kilowatt-hours. Project recreation features annually attract about 674,000 visitors.

Bonneville Power Administration (BPA) via a Memorandum of Agreement, directly funds power operation and maintenance (O&M) costs. In addition, BPA has direct funding agreements for major power replacements, additions, and improvements. O&M costs associated with canals, water distribution systems, and storage facilities for which O&M responsibilities have been transferred are funded by the respective 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; P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996. 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. 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 Fiscal Year 2018-2022:

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility, Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019	FY 2020
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$540,000	\$467,000
Land Management and Development	\$2,183,000	\$1,836,000
Fish and Wildlife Management and Development	\$291,000	\$339,000
Facility Operations	\$1,923,000	\$1,711,000
Facility Maintenance and Rehabilitation	\$1,198,000	\$698,000
Request	\$6,135,000	\$5,051,000
Non-Federal	\$1,102,000	\$890,000
Other Federal - BPA Direct Funding	\$6,631,000	\$5,526,000
Other Federal - BPA Subagreements	\$9,654,000	\$0
Other Federal - BPA Small Capital	\$1,279,000	\$702,000
Prior Year Funds	\$0	\$0
Total Program	\$24,801,000	\$12,169,000
Prior Year Funds/Non-Federal/Other Federal	(\$18,666,000)	(\$7,118,000)
Total Reclamation Allotment	\$6,135,000	\$5,051000

WORK PROPOSED FOR FY 2020:

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 project. Other - Continues general water and energy management activities within the Boise Project. Continues contact with districts and responds to outside entities on general project management. Continues to provide resources to monitor 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 local, State, and Federal entities to foster improved water management. Continues management support for planning activities. \$492,000 Non-Federal - Various (\$25,000)

Subtotal, Water and Energy Management and Development

\$467,000

Land Management and Development - Continues land management activities including: resolving trespass issues and boundary disputes, conducting field reviews and cadastral surveys of the projects 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, threatened and endangered resources, and maintaining land and realty transaction records. Continues wildland fire prevention

practices to reduce wildfire risk impacting Reclamation and managing partner capital investments by managing infestation and the spread of timber borne diseases. Continues Geographic Information System (GIS) data analysis, utilization, and update and dissemination of data for project and managing partner needs. Continues recreation planning, writing and overseeing managing partner agreements, activity planning and coordinating interagency agreements, financial assistance agreements, reviewing development/retrofit designs, and responding to Reclamation, public and interagency inquiries. Reclamation Recreation Management Act, Title XXVIII – Begins the engineering plans and construction of the shoreline at Cascade Golf Course to prevent further erosion and threat to infrastructure assets. This activity will be implemented by the City of Cascade through a cost-share partnership.

\$1,886,000 Non-Federal - Various (\$50,000)

Subtotal, Water and Energy Management and Development\$

\$1,836,000

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. 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, issued in 2005 (for bull trout) and supplemented in 2014 (for bull trout critical habitat) addresses impact of project operations and critical habitat of bull trout in the area. Continues analysis to satisfy requirements of existing BiOps including analysis of all available data to better define project impacts on fish and wildlife and their habitat. Continues Section 7 Endangered Species Act 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, trap and haul below Arrowrock Dam, and coordination and reporting.

\$339,000

Facility Operations - Continues operation and routine maintenance of Anderson Ranch Dam and Reservoir, Black Canyon Diversion Dam and Reservoir, Boise River Diversion Dam, Deadwood Dam and Reservoir, Cascade Dam and Lake Cascade, Arrowrock Dam and Reservoir, and Black Canyon Hydropumps. Continues revision of all dam Standard Operating Procedures, Emergency Action Plans (EAP) and periodic EAP exercises. 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. Continues coordination with the U.S. Army Corps of Engineers to jointly manage flood risk in the Boise River valley and continues to operate facilities to reduce flood risk in the lower Payette River valley.

<u>Power Items</u> - Begins the Middle Snake Field Office (MSFO) phone system replacement for the three Boise Project power plants and the reserved works facilities; Cascade and Deadwood Dams. Begins the replacement of diesel engine generator replacement at Deadwood Dam. Begins the acquisition process of purchasing two penstock flow meters for Black Canyon power plant. Continues the noise survey and mitigation plan for the three Boise Project power plants. Continues the Anderson radial gate coating

Boise Area Projects

project at Anderson Ranch Dam. Continues the Black Canyon power plant station service upgrades. Continues the Deadwood hydrogenerator replacement. The additional small capital funded items are for unscheduled maintenance. \$8,754,000

Other Federal - BPA Direct Funding
Other Federal - BPA Small Capital
(\$5,526,000)
Non-Federal - Various
(\$702,000)
(\$815,000)

Subtotal, Facility Operations

\$1,711,000

Facility Maintenance and Rehabilitation - Begins Anderson Dam radial gate coating and seal replacement because the gate seals and the radial gate metalwork coating will continue to deteriorate and the amount of gate leakage and the rate of corrosion of the gate metalwork will increase over time which will lead to more extensive and costly repairs. Continues replacement of the Black Canyon administration building so the administration and management personnel who currently work in the existing building will not be displaced. Continues the replacement of the bulkhead gate rail replacement at the entrance to Arrowrock Dam outlet works conduit No. 2 as placement and removal of the bulkhead gate will continue to be problematic and could hamper inspections and maintenance of the downstream conduit lining and clamshell gate. Continues the New York Canal long-term risk analysis and response project, so evaluation and mitigation of risks associated with continued operation of the urbanized canal will not be delayed. Continues required annual inspections of high and significant hazard dams and technical assistance to irrigation district partners responsible for operating and maintaining the transferred works facilities. Continues dam instrumentation oversight, data tracking, and general investigations. Less funding is requested because of the prior-year completion of Black Canyon shoreline stabilization.

698,000

Reclamation Request

\$5,051,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Cachuma Project

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

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. Operation and maintenance of all other project facilities is performed by water users. The project includes support for the endangered southern California steelhead and its critical habitat in Hilton Creek, downstream of Bradbury Dam. The Project provides about 36,000 acre-feet of supplemental irrigation water to approximately 38,000 acres and supplies 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 provide recreation benefits with an estimated 376,000 visits per year.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$283,000	\$275,000
Land Management and Development	\$320,000	\$296,000
Fish and Wildlife Management and Development	\$175,000	\$175,000
Facility Operations	\$750,000	\$853,000
Facility Maintenance and Rehabilitation	\$40,000	\$45,000
Enacted/Request	\$1,568,000	\$1,644,000
Prior Year Funds	\$319,030	\$0
Total Program	\$1,887,030	\$1,644,000
Prior Year Funds	(\$319,030)	\$0
Total Reclamation Allotment	\$1,568,000	\$1,644,000

WORK PROPOSED FOR FY 2020:

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. Continues the National Environmental Policy Act (NEPA) compliance for Project activities, in adherence with the federally-mandated requirements. Continues the administration and negotiation of water service contract renewals and water marketing activities. \$275,000

Land Management and Development - Continues day-to-day land management activities, complying with and administering resource management plans and laws and regulations, execution of agreements, contracts, and grants for the use and management of lands and the protection of recreation facilities and land resources; and providing on-site assessment, review, and oversight. Continues NEPA and Endangered Species Act compliance activities in association with public requests to use or alter recreational lands and facilities. Continues hazardous materials activities, which may include waste removal and cleanup. \$296,000

Fish and Wildlife Management and Development - Continues threatened and endangered species measures and environmental monitoring requirements from the Project Biological Opinion. Continues biological activities in order to comply with Federal and State environmental laws and regulations. Continues compliance activities associated with new operations and maintenance actions and other site specific Federal actions. \$175,000

Facility Operations - Continues day-to-day operation of Bradbury Dam to ensure delivery of water for irrigation, municipal, and industrial uses through tunnels, canals, pumping plants, and pipelines, as well as provide water releases for water rights downstream and endangered species habitat. Continues emergency management activities, which include table top and functional exercises of the emergency action plan.

\$853,000

Facility Maintenance and Rehabilitation - Continues the periodic review and field examination program of Project facilities and facility modifications to meet Federal accessibility standards. Continues oversight of water and sewage systems improvements at Lake Cachuma. **\$45,000**

Reclamation Request \$1,644,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects Status of NEPA Compliance

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 municipal and industrial 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

A calculation	FY 2019	FY 2020
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$46,000	\$35,000
Fish and Wildlife Management and Development	\$11,000	\$5,000
Facility Operations	\$76,000	\$70,000
Facility Maintenance and Rehabilitation	\$12,000	\$12,000
Enacted/Request	\$145,000	\$122,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$145,000	\$122,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$145,000	\$122,000

WORK PROPOSED FOR FY 2020:

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

Fish and Wildlife Management and Development - Continues endangered species activities associated with the Arkansas River shiner/peppered chub within the Canadian River Basin. Less funding is requested due to fewer monitoring activities required in FY 2020. **\$5,000**

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. \$70,000

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. The funding varies depending on the type of required annual inspections at the dam. \$12,000

Reclamation Request \$122,000

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 a 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 and Avalon Dams, 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.

The U.S. Fish and Wildlife Service has extended the 2006 Biological Opinion through 2027. Reclamation continues to support and implement the newly extended 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. 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Number of Threatened or Endangered species recovery activities implemented

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$1,040,000	\$85,000
Land Management and Development	\$236,000	\$346,000
Fish and Wildlife Management and Development	\$2,275,000	\$1,677,000
Facility Operations	\$1,240,000	\$1,312,000
Facility Maintenance and Rehabilitation	\$60,000	\$30,000
Request	\$4,851,000	\$3,450,000
Non-Federal	\$61,000	\$61,000
Prior Year Funds	\$117,261	\$0
Total Program	\$5,029,261	\$3,511,000
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	(\$178,261)	(\$61,000)
Total Reclamation Allotment	\$4,851,000	\$3,450,000

WORK PROPOSED FOR FY 2020:

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. "Additional Funding for Ongoing Work" provided by Congress in FY 2019 was allocated in part for the planned completion of the New Mexico Salt Basin Assessment and Development Study.

Land Management and Development - Continues cultural resource surveys. Continues land resources management tasks that include grazing rights, rights of use, Geographic Information System (GIS), 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, includes feral hog eradication and mowing of noxious weeds and tamarisk. Increase is due to additional land management requirements due to the State withdrawing as the managing partner and development of a GIS database to include all records current and historic for the Project. \$346,000

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 2017-2027 Biological Opinion for Carlsbad Project Water Operations and Water Supply Conservation. Less funding is requested due to implementation of new fish and wildlife storage agreement allowing water to be stored over multiple years.\$1,000,000

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. Continues tasks required to support and ensure

Carlsbad Project

compliance with the 2017-2027 Biological Opinion. 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. Continues oversight and management of contract performance to support and ensure compliance with mitigation requirements. Continues river model analyses and maintenance on the Pecos River Operations Model to support the Biological Opinion operations. Reclamation has completed the required habitat restoration projects and the associated monitoring from the previous Biological Opinion.

§677,000

Subtotal, Fish and Wildlife Management and Development

\$1,677,000

Facility Operations - Continues water operations and support to the Project and District for 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. Continues recreation facility plans for Brantley and Sumner State Parks to repair aging facilities and perform capital improvements. Under agreement with the State Parks, Reclamation pays up to 50 percent of recreation O&M.

\$1,373,000

Non-Federal (Carlsbad Irrigation District)

(\$61,000)

Subtotal, Facility Operations

\$1,312,000

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. Less funding is requested due to the planned completion of the Sumner Dam radial gate rehabilitation in FY 2019. **\$30,000**

Reclamation Request \$3,450,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

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 Power Plant, 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 Power Plant, 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.

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; P.L. 108-137, Section 219, December 1, 2003, amends P.L. 105-295 Sections 1(b) and 1(c); P.L. 108-361, Title II, Section 203, October 25, 2004, amends P.L. 105-295, Section 1(c); P.L. 106-377, authorized title transfer of the Sly Park Unit to El Dorado Irrigation District; 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 2018-2022 as follows:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$1,014,000	\$1,214,000
Land Management and Development	\$363,000	\$363,000
Facility Operations	\$8,838,000	\$8,837,000
Enacted/Request	\$10,215,000	\$10,414,000
Non-Federal ¹	\$6,130,000	\$6,545,000
Prior Year Funds	\$196,265	\$0
Total Program	\$16,541,265	\$16,959,000
Prior Year Funds/Non-Federal	(\$6,326,265)	(\$6,545,000)
Total Reclamation Allotment	\$10,215,000	\$10,414,000

^{1/}Central Valley Project Power Customer funding

WORK PROPOSED FOR FY 2020:

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. \$1,214,000

Land Management and Development - Continues concession management activities at Folsom, resource management, and hazardous materials management activities and programs at Folsom Lake and Lake Natomas. \$363,000

Facility Operations -

<u>Water/Power Operations</u> - Continues day-to-day operation, outreach programs, maintenance and efficient resource management of the Folsom and Nimbus dams, reservoirs, power plants, switchyards, pumping plant, and recreation facilities. CVP Preference Power Customers are funding Folsom and Nimbus Power Plants and switchyards in FY 2020. \$11,608,000

CVP Power Customers (non-Federal)

(\$6,545,000) \$5,063,000

<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 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, may fund presuppression fire activities by CalFire, Youth Corps, and other agencies; and fire response on project lands surrounding Folsom Reservoir and Lake Natoma. \$659,000

Subtotal, Facility Operations

\$8,837,000

Reclamation Request

\$10,414,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2019

Obligations by Function for Operating Projects

Project Repayment FY 2020 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Repayment of Irrigation Investment

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 Power Plant; 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 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 additional development of the hydroelectric capacity, now estimated to consist of an additional two units of 150,000 kilowatts each. The installation of the additional capacity would require additional authorization.

Reclamation completed a final draft of the Auburn-Folsom South Unit (AFSU) Special Report, Benefits and Cost Update, Central Valley Project dated December 2006. 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 reformulation 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.

The Federal Government owns approximately 26,000 acres of land for the project used by approximately 1.5 million visitors annually.

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.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 1 - Conserving Our Land and Water

Goal #2 - Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure -** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Land Management and Development	\$35,000	\$35,000
Facility Operations	\$2,184,000	\$2,184,000
Enacted/Request	\$2,219,000	\$2,219,000
Prior Year Funds	\$16,840	\$0
Total Program	\$2,235,840	\$2,219,000
Prior Year Funds	(\$16,840)	\$0
Total Reclamation Allotment	\$2,219,000	\$2,219,000

APPROPRIATION CEILING: Construction of Auburn Dam has been indefinitely deferred. Appropriate congressional committees will be advised of the ceiling status for this project as necessary. Legislation to provide additional appropriation ceiling may be needed to complete the project as authorized. Current commitments will be held within the existing ceiling.

WORK PROPOSED FOR FY 2020:

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 one million recreation visitors annually to Auburn Project Lands. In addition, funds resource management, maintenance of building and grounds, and pre-suppression fire activities by California State Department of Parks and Recreation, Youth Corps, and other agencies and fire response on project lands. **\$2,184,000**

Reclamation Request \$2,219,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2019

Project Repayment FY 2020 Status of NEPA Compliance Repayment of Irrigation Investment

Land Certification 2020

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: The 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 (DMC), 115.7 miles long with a diversion capacity of 4,600 cubic feet per second; the DMC/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 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. 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 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$2,590,000	\$2,275,000
Land Management and Development	\$161,000	\$159,000
Fish and Wildlife Management and Development	\$13,181,000	\$2,641,000
Facility Operations	\$6,701,000	\$5,589,000
Facility Maintenance and Rehabilitation	\$71,000	\$55,000
Enacted/Request	\$22,704,000	\$10,719,000
Prior Year Funds	\$5,354,877	\$0
Total Program	\$28,058,877	\$10,719,000
Prior Year Funds	(\$5,354,877)	\$0
Total Reclamation Allotment	\$22,704,000	\$10,719,000

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 not to exceed 40 percent of operation and maintenance costs.

WORK PROPOSED FOR FY 2020:

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 data are used to guide CVP/SWP operations and to address scientific questions of management interest.

\$1,088,000

<u>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. \$115,000

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. \$110,000

<u>DMC Water Quality Monitoring/Water Measurement Quality Assurance/Groundwater Monitoring</u> - Continues measurement of selenium and salinity in the DMC and Mendota Pool required for compliance

with TMDL and biological opinions. Continues 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.

\$497,000

<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. \$5,000

<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.

\$455,000

Subtotal, Water and Energy Management and Development

\$2,275,000

Land Management and Development - Continues day-to-day land management activities, complying with and administering resource management plans, laws and regulations, execution of agreements, contracts, and 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 ESA compliance in association with public requests to use or alter recreation lands and facilities. \$159,000

Fish and Wildlife Management and Development -

Jones Pumping Plant Mitigation Program - 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). \$1,136,000

<u>Contra Costa Pumping Plant Mitigation Program</u> - Continues to mitigate fishery impacts associated with the Contra Costa Pumping Plant located at Rock Slough in the central California delta.

\$11,000

<u>ESA Compliance</u> - Continues the implementation of the Biological Opinion activities to ensure Reclamation's compliance with several new and existing consultations under Section 7 of the ESA of 1973. \$190,000

<u>Suisun Marsh 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 Suisun 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.

\$1,304,000

Subtotal, Fish and Wildlife Management and Development

\$2,641,000

Facility Operations -

<u>Tracy Fish Collecting Facility</u> - Continues operation and preventive maintenance of the Tracy Fish Collecting Facility (TFCF) 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. Funding provides for deferred maintenance on appurtenances and aging equipment as well as operational

changes required of the facility. Less funding is requested due to extended schedule to complete fish salvage efficiency improvements at the TFCF. \$5,234,000

<u>Delta Cross Channel</u> - Continues operation and preventive maintenance of the Delta Cross Channel to meet water quality standards in the Delta, prevent flooding on the east side of the Delta, and protect migrating fish in the Delta. \$141,000

<u>Miscellaneous Operation and Maintenance Activities</u> - Continues day-to-day operation of the water quality monitoring stations to meet water quality standards in the Delta, support the aquatic weed research and eradication programs, and perform emergency management activities. \$214,000

Subtotal, Facility Operations

\$5,589,000

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

\$55,000

Reclamation Request

\$10,719,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2019

Obligations by Function for Operating Projects

Project Repayment FY 2020 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Repayment 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 Power Plant 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 power plant 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; 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$783,000	\$783,000
Land Management and Development	\$507,000	\$507,000
Facility Operations	\$2,772,000	\$2,772,000
Enacted/Request	\$4,062,000	\$4,062,000
Non-Federa ¹	\$2,100,000	\$2,200,000
Prior Year Funds	\$35,506	\$0
Total Program	\$6,197,506	\$6,262,000
Prior Year Funds/Non-Federal	(\$2,135,506)	(\$2,200,000)
Total Reclamation Allotment	\$4,062,000	\$4,062,000

^{1/}Central Valley Project Power Customer funding.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development -

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

\$339,000

<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 operation's plan with an instream flow schedule that meets water quality and fishery flow objectives. \$346,000

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, and structures inventory. \$507,000

Facility Operations -

<u>Land and Recreation Facilities</u> - Continues cultural and historical resource protection, 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, ensure public health and safety of the visiting public, and maintenance of federally owned facilities and infrastructure. \$2,616,000

<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 Power Plant. Central Valley Project Preference Power Customers are funding New Melones.

CVP, East Side Division

Continues operating the New Melones Lake Visitor Center and Museum, which was constructed as partial mitigation for adverse effects of inundation on cultural resources within the New Melones Historic District. \$2,356,000

Central Valley Project Power Customers (non-Federal)

(<u>\$2,200,000)</u> \$156,000

Subtotal, Facility Operations

\$2,772,000

Reclamation Request

\$4,062,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Status of Water Service and Repayment Contracts

Status of NEPA Compliance Project Repayment FY 2020

CVP, Friant Division

LOCATION: The Friant Division (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. Associated 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 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.

The Division includes the San Joaquin River Restoration Program (SJRRP). The SJRRP is a comprehensive long-term effort to restore flows to the San Joaquin River, from the Friant Dam to the confluence of the Merced River. Along with restoring river flows, objectives of the SJRRP include restoration of a self-sustaining Chinook salmon fishery while reducing or avoiding adverse water supply impacts from Restoration flows. These goals were established to meet the terms and conditions of the settlement of *NRDC*, *et al. v. Kirk Rodgers*, *et al.* Section 10009(c) of the San Joaquin River Restoration Settlement Act (Act) (Title X, Subtitle A, Part I of P.L. 111-11) established 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 for appropriation, all funds deposited into the Fund except that \$88 million of such funds are available for expenditure without further appropriation. Section 10009(c)(2) went on to identify that "provided that after October 1, 2019, all funds in the Fund shall be available for expenditure without further appropriation." Program activities funded by the San Joaquin River Restoration Fund are shown under the Permanent Appropriations tab for that account

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; P.L. 111-11, Title X, San Joaquin River Restoration Settlement Act of 2009; and P.L. 114-322, Water Infrastructure Improvements for the Nation Act, 2016.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$709,000	\$743,000
Land Management and Development	\$484,000	\$515,000
Fish and Wildlife Management and Development		
Friant Division	\$200,000	\$250,000
San Joaquin River Restoration	\$35,500,000	\$28,264,000
Facility Operations	\$3,288,000	\$3,380,000
Facility Maintenance and Rehabilitation	\$36,000	\$31,000
Enacted/Request	\$40,217,000	\$33,183,000
Prior Year Funds	\$3,564,607	\$0
Other Federal ^{1/}	\$2,000,000	\$209,356,380
Total Program	\$45,781,607	\$242,539,380
Prior Year Funds/Other Federal	(\$5,564,607)	(\$209,356,380)
Total Reclamation Allotment	\$40,217,000	\$33,183,000

¹/ Other Federal includes funding from the Central Valley Project Restoration Fund and the San Joaquin River Restoration Fund.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development -

San Joaquin Valley Land Subsidence - 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 land subsidence would cause.

\$16,000

<u>Water Marketing and Contracting</u> - Continues the administration and negotiation of water related contracts and related activities for compliance. \$464,000

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. \$230,000

<u>Miscellaneous Activities</u> - Continues groundwater monitoring and data collection to analyze groundwater levels and the effect on recharge and conjunctive use. Continues the water measurement quality assurance program to ensure water deliveries are reported accurately. \$33,000

Subtotal, Water and Energy Management and Development

\$743,000

Land Management and Development - 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 Woollomes, execution of agreements, contracts, and out-grants or other agreements for the use and management of lands and the protection of recreation facilities and land resources. Provides NEPA and

Endangered Species Act (ESA) compliance in association with public requests to use or alter recreational lands and facilities. \$515,000

Fish and Wildlife Management and Development -

<u>Friant Division</u> - Continues Environmental Impact Statement and Biological Opinion activities to ensure Reclamation's compliance with a number of new and existing consultations 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. \$250,000

San Joaquin River Restoration - Request includes funds to continue construction of the Mendota Pool Bypass component of the Mendota Pool Bypass and Reach 2B Channel Improvements Project. Funds in FY 2020 would be used to fund construction and land acquisition actions. The Mendota Pool Bypass component of this project implements one of the highest priority projects identified in the Settlement and includes the creation of a bypass channel around Mendota Pool to prevent fish entrainment in the water diversion facilities in the pool. Request includes funds for construction of the Arroyo Canal Fish Passage and Sack Dam Fish Passage Project which implements two of the highest priority projects identified in the Settlement. The project includes a fish screen on the Arroyo Canal to prevent entrainment of juvenile Chinook salmon in the canal and modifications to Sack Dam to allow for fish passage around the structure.

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. In FY 2020, the Program is focusing on completing seepage management actions necessary to allow for up to 900 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 this flow and anticipates implementing physical projects or realty actions as designs and appraisals are completed.

Request includes funds to continue construction activities for the Friant-Kern and Madera Canal Capacity Restoration projects. These two projects would restore a portion of the lost 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 and reduce or avoid impacts that would otherwise occur with the implementation of the Settlement. Request also includes funds for a variety of Program actions, including the following: implementing the Program's Conservation Strategy and flow-related mitigation measures; undertaking flow management and monitoring actions; constructing passage for fish at key barriers; undertaking fisheries reintroduction activities; implementing Water Management Goal activities; and completing remaining construction actions on the Friant-Kern Canal Reverse Flow Facilities. Less funding is requested due to an extended schedule for the completion of the project.

\$237,620,380

Other Federal – Central Valley Project Restoration Fund
(\$2,000,000)
Other Federal – San Joaquin River Restoration Fund
(\$207,356,380)
\$28,264,000

Subtotal, Fish and Wildlife Management and Development

\$28,514,000

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 on 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. 3,064,000

<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.

\$316,000

Subtotal, Facility Operations

\$3,380,000

Facility Maintenance and Rehabilitation - Continues operation and maintenance inspections and facility modifications to meet Federal accessibility standards. Funding provides for the anticipated Periodic Facility Reviews as required under the Review of Operation and Maintenance Program. **§31,000**

Reclamation Request \$33,183,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Status of NEPA Compliance Project Repayment FY 2020

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.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$11,203,000	\$5,877,000
Land Management and Development	\$1,648,000	\$1,577,000
Fish and Wildlife Management and Development	\$5,370,000	\$316,000
Facility Operations	\$237,000	\$207,000
Facility Maintenance and Rehabilitation	\$163,000	\$163,000
Enacted/Request	\$18,621,000	\$8,140,000
Other Federal 1/	\$48,058,000	\$42,127,000
Prior Year Funds	\$1,051,061	\$0
Total Program	\$67,730,061	\$50,267,000
Prior Year Funds/Other Federal	(\$49,109,061)	(\$42,127,000)
Total Reclamation Allotment	\$18,621,000	\$8,140,000

^{1/}Central Valley Project Restoration Fund

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development -

<u>Water Marketing</u> - 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, water rights litigation, repayment capacity and economic studies, water rights, and water transfer activities.

\$4,048,000

Other Technical Support - Continues technical support for National Environmental Policy Act compliance and groundwater support, irrigation and drainage, and evaluation and maintenance of electronic models and economic model maintenance.

\$774,000

Geographic Information System (GIS) - 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. \$232,000

<u>Water Quality Activities</u> - Continues water quality and groundwater monitoring, coordination of the Central Valley Project Water Quality Program, and work on the Clean Water Action Plan. \$522,000

<u>Central Valley Project/State Water Project</u> - Continues work on groundwater/surface water model and data development. \$117,000

Salt and Baron Total Maximum Daily Load/Management Agency Agreement (TMDL/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 State Central Valley Regional Water Quality Control Board; and development and implementation of a long-term sustainable program.

\$184,000\$

Subtotal, Water and Energy Management and Development

\$5,877,000

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, resource activities, environmental management system (EMS), and land management activities. \$1,577,000

Fish and Wildlife Management and Development -

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.

\$316,000

analyze data, and provide recommendations to mitigate impacts.	\$316,000
CVPIA Administration ^{1/}	\$1,500,000
Anadromous Fish Restoration Program ^{1/}	\$12,627,000
Habitat Restoration Program ^{1/}	\$1,000,000
Dedicated Project Yield ^{1/}	\$700,000
Restoration of Riparian Habitat and Spawning Gravel 1/	\$2,000,000
Central Valley Comprehensive Assessment/Monitoring Program ^{1/}	\$3,000,000
Anadromous Fish Screen Program ^{1/}	\$1,200,000
Refuge Water Conveyance 1/	\$16,400,000
Refuge Water Supply, Facility Construction ^{1/}	\$3,000,000
Ecosystem/Water Systems Operation Model ^{1/}	<u>\$700,000</u>
Fish and Wildlife Management and Development	\$42,443,000
Subtotal, Restoration Funds	(\$42,127,000)
Subtotal, Water and Related Resources	<u>\$316,000</u>

¹/ See Central Valley Project Restoration Fund work proposed for description.

Subtotal, Fish and Wildlife Management and Development

\$316,000

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. \$207,000

Facility Maintenance and Rehabilitation - Continues monitoring of landslides on Reclamation lands, review of operations, and periodic examination of facilities. \$163,000

Reclamation Request \$8,140,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2019

Obligations by Function for Operating Projects

Project Repayment FY 2020

Repayment of Irrigation Investment

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, RAX items previously requested in individual divisions and units of the CVP have been combined in a single program. Consolidating all RAX items in the CVP into a single program 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: 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 project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Maintenance and Rehabilitation	\$18,827,000	\$28,780,000
Enacted/Request	\$18,827,000	\$28,780,000
Non-Federal	\$10,000,000	\$6,799,000
Prior Year Funds	\$103,252	\$0
Total Program	\$28,930,252	\$35,579,000
Prior Year Funds/Non-Federal ¹	(\$10,103,252)	(\$6,799,000)
Total Reclamation Allotment	\$18,827,000	\$28,780,000

^{1/} Central Valley Project Power Customer funding

WORK PROPOSED FOR FY 2020:

Facility Maintenance and Rehabilitation -

<u>CVP</u>, American River Division (Folsom Dam and Facilities) – Begins refurbishment of the radial gates at Nimbus Dam and replacement of the fish diversion structure at Nimbus Fish Hatchery. Continues replacement of butterfly valve at Nimbus Fish Hatchery. Increase due to the accelerated schedule for the replacement and modernization of the fish diversion structure at the Nimbus Fish Hatchery.

\$10,100,000

<u>CVP</u>, West San Joaquin Division (San Luis Unit Facilities) – Continues refurbishing butterfly valves, generator re-winding, and pump casing refurbishment at the Gianelli Pumping/Generating Plant. \$5,000.000

<u>CVP</u>, <u>Delta Division (Tracy Facilities)</u> – Continues construction of the Antioch Fish Release Facility, replacement of the primary louver and crane, installation of a well water supply system at the Tracy Fish Collection Facility, and rewind of Unit 6 pump motor at the Jones Pumping Plant.

\$3,980,000

CVP, Shasta Division (Shasta Facilities) – Begins refurbishment of the Temperature Control Device (TCD) attached to the upstream side of Shasta Dam and Shasta spillway spall repair. Continues upgrade of the fire alarm systems at Shasta Facilities. Increase due to repairs of the Shasta spillway and the TCD refurbishment.

\$6,000,000

<u>CVP, Trinity Division (Trinity Facilities)</u> – Begins construction of the Trinity Fish Hatchery domestic water system and replacement of the turbine runner at Spring Creek Power Plant. Continues replacement of station service transformers at Spring Creek, JF Carr, and Trinity Power Plants.

\$3,700,000

<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 Division, Trinity River Power Plant, and Spring Creek Power Plant and the Keswick Buss within Shasta Division.

\$6,799,000

CVP Power Customers (non-Federal)

(\$6,799,000)

<u>\$0</u>

Reclamation Request \$28,780,000

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 have been decommissioned. The Division provides full irrigation service to 34,319 acres and supplies 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; P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992, and P.L. 114-322, Water Infrastructure Improvements for the Nation Act, 2016.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$811,000	\$811,000
Land Management and Development	\$176,000	\$176,000
Fish and Wildlife Management and Development	\$12,808,000	\$688,000
Facility Operations	\$495,000	\$495,000
Enacted/Request	\$14,290,000	\$2,170,000
Prior Year Funds	\$1,251,466	\$0
Total Program	\$15,541,466	\$2,170,000
Prior Year Funds	(\$1,251,466)	\$0
Total Reclamation Allotment	\$14,290,000	\$2,170,000

WORK PROPOSED FOR FY 2020:

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 of 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. Also continues monitoring and reporting on water operations on the Sacramento River and Stony Creek.

\$663,000

Water Quality Monitoring - 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. \$129,000

<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. \$176,000

Fish and Wildlife Management and Development –

Red Bluff Fish Passage Monitoring and Evaluation – Continues evaluation and adaptive management of water releases from Shasta/Keswick Reservoirs and provides real-time information to the Delta Operations for Salmon and Sturgeon Group for fishery and water operations management.

\$400,000

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 Central Valley Project, 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 will be used to continue habitat restoration and fish behavior research to inform the design and operations of the project. \$288,000

Subtotal, Fish and Wildlife Management and Development

\$688,000

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. Continues the Hydrilla detection and eradication and aquatic weed research programs.

§495,000

Reclamation Request

\$2,170,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2019

Obligations by Function for Operating Projects

Project Repayment FY 2020 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Repayment 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 151 feet high, with a crest length of 1,116 feet, a dike structure 79 feet high, a crest length of 1,296 feet, and a reservoir capacity of 9,785 acre-feet; Hollister Conduit, 19.5 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 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, as amended. 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$75,000	\$85,000
Land Management and Development	\$100,000	\$128,000
Fish and Wildlife Management and Development	\$10,000	\$5,000
Facility Operations	\$4,000	\$5,000
Facility Maintenance and Rehabilitation	\$94,000	\$68,000
Enacted/Request	\$283,000	\$291,000
Prior Year Funds	\$9,902	\$0
Total Program	\$292,902	\$291,000
Prior Year Funds	(\$9,902)	\$0
Total Reclamation Allotment	\$283,000	\$291,000

WORK PROPOSED FOR FY 2020:

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.

\$35,000

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. \$50,000

Subtotal, Water and Energy Management and Development

\$85,000

Land Management and Development - Continues day-to-day land management activities required for the San Justo Reservoir and associated facilities. These activities include oversight and review of land use requests; execution of agreements, contracts, and outgrants or other agreements for use and management of lands and protection of recreation facilities and land resources; and complying with and administering laws and regulations. Provides NEPA and Endangered Species Act (ESA) compliance in association with requests to use or alter recreational lands and facilities. 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.

Fish and Wildlife Management and Development - Continues implementation of existing San Felipe Biological Opinion requirements and consultations under Section 7 of the ESA. Continues environmental monitoring of the effect of pest management activities on threatened and endangered species located on or around project facilities in compliance with Federal and State environmental laws and regulations. **\$5,000**

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. \$5,000

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, which includes repair of landslides caused by seepage from the reservoir and replacement of toe drains in the dam.

§68,000

Reclamation Request \$291,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2019

Obligations by Function for Operating Projects

Project Repayment FY 2020 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Repayment 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 (af); Shasta Power Plant, 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 af; and Keswick Power Plant, consisting of three main generating units with a total capacity of 117,000 kilowatts. 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 spring-run Chinook salmon. Coleman National Fish Hatchery, funded by Reclamation and operated by the U.S. Fish and Wildlife Service, mitigates for Shasta and Keswick Dams by producing juvenile Chinook salmon and steelhead. The Division also includes the Anderson-Cottonwood Irrigation District (ACID) Diversion Dam fish ladder system and public viewing complex. The Division provides supplemental irrigation service to 499,694 acres, 10,710 af 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; P.L. 102-575, Title XXXIV, Central Valley Project Improvement Act of 1992, October 30, 1992, and P.L. 114-322, Water Infrastructure Improvements for the Nation Act, 2016.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$226,000	\$226,000
Land Management and Development	\$168,000	\$168,000
Fish and Wildlife Management and Development	\$3,080,000	\$80,000
Facility Operations	\$9,460,000	\$8,343,000
Enacted/Request	\$12,934,000	\$8,817,000
Other Federal/Non-Federal ¹	\$10,200,000	\$10,600,000
Prior Year Funds	\$13,176,031	\$0
Total Program	\$36,310,031	\$19,417,000
Prior Year Funds/Other Federal/Non-Federal	(\$23,376,031)	(\$10,600,000)
Total Reclamation Allotment	\$12,934,000	\$8,817,000

¹/Central Valley Project Restoration Fund and Central Valley Project Power Customer funding

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues Water Quality Monitoring Program and administration of the Water Service and Repayment Contract Program. \$226,000

Land Management and Development -

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. Continues to handle, collect, store and/or dispose of hazardous materials and waste created as a result of operations within the Division. \$168,000

Fish and Wildlife Management and Development -

Clear Creek Restoration - Continues gravel additions that will benefit spawning habitat for spring-run Chinook salmon and steelhead.

> \$730,000 (\$650,000)

\$80,000

Subtotal, Fish and Wildlife Management and Development

\$80,000

Facility Operations -

Restoration Fund^{1/}

Coleman National Fish Hatchery - Continues operation and maintenance (O&M) of the Coleman National Fish Hatchery, including Livingston 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. \$4,610,000

¹/ See Central Valley Project Restoration Fund, Work Proposed for FY 2020 for description of activities funded within Restoration Fund.

<u>Miscellaneous Activities</u> - Continues O&M of Shasta Dam, Shasta Dam Temperature Control Device, and associated control and monitoring equipment and the Shasta area domestic water supply distribution system (Toyon). Continues Security Fortification activities. Central Valley Project Preference Power Customers are funding Keswick Dam and Power Plant and Shasta Power Plant.

\$13,677,000 Central Valley Project Power Customers (non-Federal) (\$9,950,000) \$3,727,000

<u>Hydrilla Detection and Eradication</u> - Continues to support the aquatic weed research and eradication programs in Shasta County. \$6,000

Subtotal, Facility Operations

\$8,343,000

Reclamation Request

\$8,817,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2019

Obligations by Function for Operating Projects

Project Repayment FY 2020 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Repayment of Irrigation Investment

CVP, Trinity River Division

LOCATION: The Trinity River Division (Division) of the Central Valley Project (CVP) is located in Trinity and Shasta Counties 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 (af); Trinity Power Plant, with two generators and a total capacity of 140,000 kilowatts; Lewiston Dam and Reservoir, an earthfill structure 91 feet high and 745 feet long with a capacity of 14,660 af; Lewiston Power Plant, with one unit and a capacity of 350 kilowatts; Trinity River Fish Hatchery; Clear Creek Tunnel, 10.7 miles long; J.F. Carr Power House, 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 af; Spring Creek Tunnel and Power Plant, 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 af; and related pumping and distribution facilities; Buckhorn (Grass Valley Creek) Debris Dam, an earthfill structure 90 feet high with a concrete spillway located on the right abutment, a crest length of 700 feet, and a capacity of 1.100 af. 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 af 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 Central Valley Project Improvement Act (CVPIA) of 1992, Title 34, P.L. 102-575, 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 Mainstem 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 U.S. Fish and Wildlife Service, 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.

AUTHORIZATION: The following statutes provide adequate substantive and funding authority to operate the project and implement fish and wildlife restoration activities: 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$315,000	\$315,000
Land Management and Development	\$65,000	\$65,000
Fish and Wildlife Management and Development	\$11,911,000	\$9,991,000
Facility Operations	\$4,777,000	\$4,077,000
Request	\$17,068,000	\$14,448,000
Other Federal ¹	\$1,500,000	\$1,500,000
Non-Federal ²	\$5,850,000	\$6,020,000
Prior Year Funds	\$95,564	\$0
Total Program	\$24,513,564	\$21,968,000
Prior Year Funds/Non-Federal/Other Federal	(\$7,445,564)	(\$7,520,000)
Total Reclamation Allotment	\$17,068,000	\$14,448,000

^{1/}Central Valley Project Restoration Fund funding

WORK PROPOSED FOR FY 2020:

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. \$315,000

Land Management and Development -

<u>Hazardous Materials Management Program</u> - Continues to handle, collect, store and/or dispose of hazardous materials and wastes created as a result of operations within the Division.

\$20,000

<u>Land Management Activities</u> - Continues land management services associated with Reclamation property within 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.

\$45,000

Subtotal, Land Management and Development

65,000

²/Central Valley Project Power Customer funding

Fish and Wildlife Management and Development -

<u>Trinity River Restoration Program</u> - 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 rehabilitation, watershed projects and planned restoration flows.

Restoration Fund^{1/} \$11,491,000 \$(\$1,500,000)\$9,991,000

Subtotal, Fish and Wildlife Management and Development

\$9,991,000

Facility Operations -

<u>Fish and Wildlife Facilities</u> - Continues essential operations and maintenance (O&M) of the Trinity River Fish Hatchery (Hatchery), including funding for fish feed that maintains acceptable growth rates and well-being of cultured salmon and steelhead at the Hatchery. Continues basic support for Hoopa Valley and Yurok Tribe Hatchery Co-Management and Coho salmon marking/tagging.

\$2,612,000

<u>Miscellaneous Activities</u> - Continues O&M of Trinity, Whiskeytown, Spring Creek, and Buckhorn dams, including outlet facilities and associated control and monitoring equipment and Clear Creek and Spring Creek Tunnels. Continues stream gauges, O&M of Whiskeytown Glory Hole log boom, Spring Creek Intake Temperature Curtain, Oak Bottom Temperature Curtain and J.F. Carr Power House buoy lines. CVP Preference Power Customers provide funding for Trinity, Spring Creek, and Lewiston Power Plants, J.F. Carr Power House, and Lewiston Dam and Reservoir.

\$7,474,000 Central Valley Project Power Customers (non-Federal) (\$6,020,000) \$1,454,000

<u>Hydrilla Detection and Eradication</u> - Continues to support aquatic weed research and eradication programs. \$11,000

Subtotal, Facility Operations

Reclamation Request

\$4,077,000

\$14,448,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2019

Obligations by Function for Operating Projects

Project Repayment FY 2020 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Repayment of Irrigation Investment

¹/ See Central Valley Project Restoration Fund, Work Proposed for FY 2020 for description of activities funded with Restoration Fund.

CVP, Water and Power Operations

LOCATION: The Central Valley Operations Office is located in Sacramento County, California.

DESCRIPTION/JUSTIFICATION: The Central Valley Operations Office is responsible for the day-to-day water and power operations of the Central Valley Project (CVP). Responsibilities include development of annual water supply allocations for the 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 California State Water Resources Control Board (SWRCB) 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 project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Program Financial Data

1 1081 1		
Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$4,482,000	\$1,822,000
Fish and Wildlife Management and Development	\$6,007,000	\$806,000
Facility Operations	\$11,890,000	\$10,390,000
Facility Maintenance and Rehabilitation	\$403,000	\$403,000
Enacted/Request	\$22,782,000	\$13,421,000
Non-Federal ¹	\$8,377,000	\$8,386,000
Prior Year Funds	\$156,761	\$0
Total Program	\$31,315,761	\$21,807,000
Prior Year Funds/Non-Federal	(\$8,533,761)	(\$8,386,000)
Total Reclamation Allotment	\$22,782,000	\$13,421,000

¹/Central Valley Project Power Customer funding

WORK PROPOSED FOR FY 2020:

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 would 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 update scientific understanding of listed species and 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 supporting NEPA compliance requirements associated with the re-initiation of ESA Section 7 consultation on the Coordinated Long-Term Operation of the CVP and SWP. This re-initiation of consultation will result in coordinated Fish and Wildlife Service (FWS)/National Marine Fisheries Service (NMFS) biological opinions that would incorporate new operations or facilities with coordinated long-term operation of the CVP and SWP. This activity supports the Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in the West, issued on October 19, 2018. Less funding is requested because \$950.000

<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.

\$100,000

Subtotal, Water and Energy Management and Development

\$1,822,000

Fish and Wildlife Management and Development –

<u>Water Management ESA</u> - 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 Biological Opinion. \$400,000

ESA Compliance on Coordinated Long-Term Operation of the CVP and SWP - Continues supporting ESA compliance requirements associated with the re-initiation of ESA consultation on the Coordinated Long-Term Operation of the CVP and SWP. This re-initiation will result in the preparation of Biological Assessment and an FWS/NMFS Integrated Biological Opinion that would incorporate new Delta conveyance operations proposed by California Water Fix with coordinated long-term operation of the CVP and SWP. This re-initiation is due to changed circumstances related to the severe declines in endangered fish species populations due to the recent drought. Funding also supports high priority science studies that are developed through the Collaborative Science Adaptive Management Program. This activity supports the Presidential Memorandum on Promoting the Reliable Supply and Delivery of Water in the West, issued on October 19, 2018. \$406,000

Subtotal, Fish and Wildlife Management and Development

\$806,000

Facility Operations -

Power Operations - Continues to provide for the power program operational oversight and procedures required to standardize operational practices, to conform to sound safety practices, and to operate in accordance with applicable laws and agreements. \$1,224,000

Continues review and renegotiations of master interconnect contracts to meet project power needs. Reviews pumping plants, power plants, and attendant facilities to ensure facilities are operated and maintained in accordance with Reclamation standards. 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, including energy accounting associated with supporting pumping operations for contractual water deliveries. Provides supervision, program oversight, and leadership of the Power Management Team and provides essential generation/load scheduling for the CVP. 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. \$7,400,000

CVP Power Customers (non-Federal) (\$7,400,000)

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) \$0

State Water Barriers/Water Wheeling Project - Continues conveyance of CVP water through State Water Project 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 Department of Water Resources (DWR) and this program is to compensate DWR for the CVP's share of the expenses. \$2,979,000

Water Operations - Continues daily integrated operations scheduling for water deliveries from project facilities, flood control, water temperature control, and salinity control. \$1,632,000

Hydromet - 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

Central Valley Automated Control System (CVACS) - Continues operation and maintenance of the CVACS installed in powerplants, dams, and the Joint Operations Centers located throughout the Mid-Pacific (MP) Region. Continues operation and maintenance of technology supporting complex analysis, planning, and coordination needs of decision-makers managing limited resources to meet statutory requirements while providing water deliveries, flood control, and reliable hydropower generation. Provides for North American Electric Reliability Corporation Critical Infrastructure Protection (NERC CIP) compliance activities related to operations within the 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, and responsible for the management and licensing of all regional radio frequency licenses.

Subtotal, Facility Operations

\$10,390,000

Facility Maintenance and Rehabilitation -

CVACS - 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 NERC CIP compliance related to facility maintenance and rehabilitation for the MP Region. \$886,000 CVP Power Customers (non-Federal) (\$886,000) \$0

Subtotal, Facility Maintenance and Rehabilitation

\$403,000

Reclamation Request \$13,421,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects Project Repayment FY 2020

CVP, West San Joaquin Division San Luis Unit

LOCATION: The Central Valley Project (CVP), West San Joaquin Division, San Luis Unit (Unit) 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: This 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 CVP, the Unit delivers water and power supplies developed in the American River, Shasta, and Trinity River Divisions to users located in the Unit service area. The Unit 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.

Status of the Drainage Alternatives - For decades, elevated levels of salinity and selenium, and the accumulation of shallow groundwater in the Central Valley Project, San Luis Unit (SLU) have impacted farming operations and generated litigation for drainage service. In 2000, the 9th Circuit Court of Appeals ruled that Reclamation must provide drainage service to the SLU. Planning and environmental reviews culminated with a 2007 Record of Decision (ROD) and a Feasibility Report containing designs and cost estimates for drainage service facilities in the SLU and some adjacent areas, which was forwarded to Congress in 2008. Due to the estimated \$2.7 billion price tag for the project, the Federal government convened settlement discussions with the local water districts, State and local government agencies, environmental groups, and other interested parties. A Court order stay was issued, and drainage activities were suspended while settlement discussions continued. Drainage settlements were reached, however, enabling legislation was not enacted. In January 2018, the Court order stay was lifted, and all drainage implementation activities were resumed. Reclamation submitted the January 2018 Revised Control Schedule (revised control schedule) to the Court in January 2018. The revised control schedule outlined the reinitiation of drainage services in the Westlands Water District central sub-area. Further revisions of the control schedule are anticipated and will include work to be performed in Westlands north and south sub-areas.

A 28-mile portion of the San Luis Drain is currently used by the San Luis & Delta-Mendota Water Authority (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 (GDA) located west of Firebaugh and south of Los Banos, California. The December 2009 Agreement for Continued Use of the San Luis Drain through December 31, 2019 (Use Agreement) allows the Authority to convey subsurface drainage water from the 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 Juaquin River Improvement Project. The Agreement supports the GBP goal to ultimately eliminate discharge of agricultural drainage into the San Joaquin River. Reclamation will work 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

COMPLETION DATA: As of September 30, 2018, the project was 75 percent complete.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$5,548,000	\$2,478,000
Land Management and Development	\$356,000	\$236,000
Fish and Wildlife Management and Development	\$75,000	\$44,000
Facility Operations	\$5,596,000	\$4,857,000
Facility Maintenance and Rehabilitation	\$85,000	\$51,000
Enacted/Request	\$11,660,000	\$7,666,000
Prior Year Funds	\$1,505,486	\$0
Total Program	\$13,165,486	\$7,666,000
Prior Year Funds	(\$1,505,486)	\$0
Total Reclamation Allotment	\$11,660,000	\$7,666,000

Total Cost Information*

	Total Estimated Cost	Total to 9/30/18	FY 2019 Enacted	FY 2020 President's Budget	Balance to Complete
Reclamation	\$2,311,313,802	\$643,617,646	\$6,437,000	\$1,870,000	\$1,659,389,156
Adjustments ^{1/}	\$265,603,533	\$208,046,592	\$0	\$0	\$57,556,941
Total	\$2,576,917,335	\$851,664,238	\$6,437,000	\$1,870,000	\$1,716,946,097

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

Cost Allocation and Methodology

Allocation	FY 2019	FY 2020
Irrigation	\$1,577,071,000	\$1,567,982,000
Municipal and Industrial Water	\$137,535,000	\$171,647,000
Recreation	\$7,169,000	\$7,169,000
Fish and Wildlife	\$420,698,000	\$451,432,000
Flood Control	\$104,759,000	\$104,243,000
Navigation	\$7,559,000	\$7,520,000
State of California Share	\$252,740,000	\$252,739,000
Archaeological Resources	\$7,000	\$7,000
Highway Improvements	\$1,383,000	\$1,383,000
Kesterson Cleanup	\$6,800,000	\$6,800,000
Safety, Security, Law Enforcement	\$1,381,000	\$1,381,000
Safety of Dams	\$4,612,000	\$4,612,000
Total ^{1/}	\$2,521,714,000	\$2,576,915,000

¹/Rounding adjustment of -\$2,335 made for allocation purposes.

METHODOLOGY: The operational and financial integration provision of the CVP authorization requires that the cost allocation, rate setting, 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.

¹/ Includes \$225,096,627 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 \$36,000,000 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; and adjusted by \$4,184,300 for transfers, credits, and other expenditures.

APPROPRIATION CEILING: Appropriations authorized for the Federal and joint-use facilities are \$999,560,000 (October 2019). The comparable Federal obligation is \$466,574,060 which does not exceed the ceiling by more than the net 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 \$190,684,537 (including \$13,640,951 Loan Program funds provided to the San Luis Water District), which does not exceed the ceiling by more than the net 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.

WORK PROPOSED FOR 2020:

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.

\$1,000

<u>San Luis Canal Cross Drainage Inventory</u> - Continues preparation of required reports to address the San Luis Canal cross drainage problems. \$1,000

<u>Drainage Management Program</u> - Continues Reclamation's participation in the Grassland Bypass Project. 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. Reclamation will continue to monitor the regulatory and environmental requirements under the Use Agreement through December 31, 2019.

\$860,000

Funding provided in FY 2020 would implement drainage activities as described in the revised control schedule including project planning, land and rights acquisition, operation of the demonstration treatment plant, investigation and design of a treatment facility in Westlands central sub-area, and investigations and design of collector and conveyance systems. These are preliminary steps for the construction of the new treatment facility and reuse area in Westlands central sub-area. Westland central sub-area construction is anticipated to begin the first quarter of FY 2022. \$1,000,000

<u>Water Marketing and Contracting</u> - Continues the administration and negotiation of water related contracts and related activities for contract compliance, repayment, and water marketing activities. \$256,000

<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. \$106,000

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.

\$249,000

Subtotal, Water and Energy Management and Development

\$2,478,000

Land Management and Development - 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. 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. Less funding is requested as no new land-use authorization requests or out-grant opportunities anticipated in FY 2020. \$236,000

Fish and Wildlife Management and Development - Continues the Endangered Species Conservation Program to meet the habitat needs of special status species. Continues the 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. **\$44,000**

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. Less funding is requested due to the extended schedule to complete deferred maintenance at the joint-use facilities. \$4,840,000

<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 Unit, 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

\$4,857,000

Facility Maintenance and Rehabilitation - Continues operations and maintenance inspections and facility modifications to meet Federal accessibility standards. \$51,000

Reclamation Request \$7,666,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2019

Obligations by Function for Operating Projects

Project Repayment FY 2020 Status of NEPA Compliance

Status of Water Service and Repayment Contracts

Repayment of Irrigation Investment

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 2018-2022:

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget	
	Litacted	Tresident's Budget	
Water and Energy Management and Development	\$114,000	\$110,000	
Land Management and Development	\$71,000	\$95,000	
Facility Operations	\$2,091,000	\$1,600,000	
Facility Maintenance and Rehabilitation	\$325,000	\$250,000	
Request	\$2,601,000	\$2,055,000	
Non-Federal	\$0	\$110,000	
Prior Year Funds	\$208,767	\$0	
Total Program	\$2,809,767	\$2,165,000	
Prior Year Funds/Non-Federal	(\$208,767)	(\$110,000)	
Total Reclamation Allotment	\$2,601,000	\$2,055,000	

WORK PROPOSED FOR FY 2020:

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, development of new water rights, and water quality monitoring. \$110,000

Land Management and Development - Continues land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. Increase is due to realignment of project priorities and project coordination programs. \$95,000

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 and for the power plants, 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.

\$1,710.000

Non-Federal (State of Colorado)

(\$110,000)

Subtotal, Facility Operations

\$1,600,000

Facility Maintenance and Rehabilitation - Continues renovation of the Oak Point Campground. 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. \$250,000

Reclamation Request \$2,055,000

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 and an average annual power generation of 613,000 megawatt-hours. 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management for adaptation to environmental changes

Measure: Percent of baseline acres infested with invasive plant species that are under control

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measures: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$293,000	\$26,000
Land Management and Development	\$122,000	\$37,000
Fish and Wildlife Management and Development	\$33,000	\$33,000
Facility Operations	\$13,416,000	\$13,131,000
Facility Maintenance and Rehabilitation	\$311,000	\$382,000
Enacted/Request	\$14,175,000	\$13,609,000
Non-Federal	\$9,452,000	\$1,506,000
Prior Year Funds	\$0	\$0
Total Program	\$23,627,000	\$15,115,000
Prior Year Funds/Non-Federal	(\$9,452,000)	(\$1,506,000)
Total Reclamation Allotment	\$14,175,000	\$13,609,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues to provide assistance in the evaluation of proposed water conservation measures and demonstration projects identified in conservation plans that promote effective water management and conservation. Less funding is requested because "Additional Funding for Ongoing Work" provided by Congress in FY 2019 was allocated in part for completion of the Grand Lake Clarity evaluation activities. \$26,000

Land Management and Development - Utilizes the cost-share program under P.L. 102-575, Title XXVIII, the Reclamation Recreation Management Act of 1992, for the development and rehabilitation of public use facilities in order to comply with health, safety, and accessibility standards. Funding for project prioritized to meet mission critical activities under Facility Operation and Facility Maintenance and Rehabilitation. \$64,000

Non-Federal Participation - Larimer County Parks Department of Natural Resources, Estes Valley Recreation and Parks District, and Town of Grand Lake

(\$27,000)

Subtotal, Land Management and Development

\$37,000

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. \$33,000

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. Continues to improve water quality and clarity at Grand Lake to meet State of Colorado water quality standards. \$14,610,000

Non-Federal - Northern Colorado Water Conservancy District Partnership (\$1,479,000)

Subtotal, Facility Operations

\$13,131,000

Facility Maintenance and Rehabilitation - Continues East Portal Dam spillway repairs. Continues facility examinations to ensure structural integrity relating to safe and reliable operations of the structures, and inspection of bridges 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 requirements. The funding varies depending on the type of required annual inspections at the dam.

Reclamation Request \$13,609,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Colorado River Compliance Activities

LOCATION: Projects are located in 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 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. Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, 2019, Title V, Sec. 505.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Number of Threatened or Endangered species recovery activities implemented

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted*	FY 2020 President's Budget	
Water and Energy Management and Development	\$1,400,000	\$1,400,000	
Fish and Wildlife Management and Development*	\$20,000,000	\$20,000,000	
Enacted/Request	\$21,400,000	\$21,400,000	
Non-Federal	\$0	\$0	
Prior Year Funds	\$0	\$0	
Total Program	\$21,400,000	\$21,400,000	
Prior Year Funds/Non-Federal	\$0	\$0	
Total Reclamation Allotment	\$21,400,000	\$21,400,000	

^{*} Consistent with discretionary funding received in the FY 2019 Energy and Water Development appropriations bill (P.L. 115-244, section 505), for "an additional amount for "Department of the Interior-Bureau of Reclamation-Water and Related Resources", ...to carry out environmental stewardship and endangered species recovery efforts pursuant to the Grand Canyon Protection Act of 1992 (Public Law 102-575), Public Law 106-392, the Colorado River Basin Project Act (43 U.S.C. 155l(b)), and the Act of April 11, 1956 (commonly known as the "Colorado River Storage Project Act") (43 U.S.C. 620n Prior to FY2019 this project has been funded from Revenue Financed Programs (Power Revenues).

WORK PROPOSED FOR FY 2020:

Colorado River Storage Project (Initial Units) – Continues Office of Worker's Compensation Program payments. Continues management, oversight, and administration of the project. Continues to monitor Ute Ladies' Tresses (a threatened plant) per the Biological Opinion requirements for operation of Flaming Gorge Dam and Reservoir. 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. 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. Continues experimental flow research; if hydrologic conditions preclude conducting these experiments, expenditure of these funds will be deferred to subsequent years.

\$20,000,000

Water Quality Program - Continues support for quality of water studies which are used to quantify the transport of chemical constituents and evaluate trends in water quality of the river and provide necessary data and information required by resource managers of the river who are responsible for meeting longstanding legal agreements that regulate the flow and quality of the river water.

\$1,020,000

Consumptive Use - Continues support for consumptive use studies involving consumption of water brought about by human endeavors and in this report includes use of water for municipal, industrial, agricultural, power generation, export, recreation, fish and wildlife, and other purposes, along with the associated losses incidental to these uses. The Studies are prepared pursuant to the Colorado River Basin Project Act of 1968, Public Law 90-537. Title VI, Section 601(b) (1) of the Act directs the Secretary to

make reports as to the annual consumptive uses and losses of water from the Colorado River System (both Upper and Lower Basins) to the President, the Congress, and to the Governors of each State signatory to the Colorado River Compact. The data contained in the reports are central to the management of the Colorado River system.

\$380,000

Reclamation Request \$21,400,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects Repayment of Irrigation Investment

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 power 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 Indian and non-Indian water distribution and storage 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 provides 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. Recreation planning, implementation, and oversight continues in cooperation with project beneficiaries. Remaining system reliability needs will be met through completion of the Tucson Reliability Division work, estimated to be complete in 2023. 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 until 2019.

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.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 6: Modernizing Our Organization and Infrastructure for the Next 100 Years Goal #3: Prioritize DOI infrastructure needs and reduce deferred maintenance backlog Measure: Percent of museum collections on DOI inventory in good condition

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 Pima 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 (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 canal and turnouts to the reservations were complete and capable of water deliveries to each reservation. 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, Incorporated. 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 2020. 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 Operating Agreement was formally executed in 2000. The Tucson terminal storage commitments have yet to be completed. Work is ongoing under the Tucson Reliability Division to document infrastructure solutions no longer determined necessary and to fulfill remaining commitments to CAP users. 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.

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2019 Enacted		FY 2020 President's Budget	
Activity	Arizona Water Settlements Act	Water & Related Resources	Arizona Water Settlements Act	Water & Related Resources
Water and Energy Management and Development	\$18,858,000	\$15,086,000	\$20,000,000	\$5,358,000
Land Management and Development	\$0	\$386,000	\$0	\$386,000
Facility Operations	\$0	\$538,000	\$0	\$538,000
Facility Maintenance & Rehabilitation	\$0	\$110,000	\$0	\$110,000
Request	\$18,858,000	\$16,120,000	\$20,000,000	\$6,392,000
Non-Federal	\$0	\$200,000	\$0	\$222,000
Prior Year Funds	\$0	\$68,578	\$0	\$0
Total Program	\$18,858,000	\$16,388,578	\$20,000,000	\$6,614,000
Development Fund – AWSA Revenues	(\$18,858,000)	\$0	(\$20,000,000)	\$0
Prior Year Funds/Non-Federal	\$0	(\$268,578)	\$0	(\$222,000)
Total Reclamation Allotment	\$0	\$16,120,000	\$0	\$6,392,000

Total Cost Information*

	Total Estimated Cost ^{5/}	Total to 9/30/18 4/	FY 2019	FY 2020	Balance to Complete
Lower Colorado River Basin Development Fund ^{1/}	\$4,153,164,786	\$3,490,077,986	\$26,609,000	\$25,023,000	\$611,454,800
Non-Indian Distribution Systems ^{2/}	\$240,951,222	\$240,951,222	\$0	\$0	\$0
Project Total	\$4,394,116,008	\$3,731,029,208	\$26,609,000	\$25,023,000	\$611,454,800
Adjustments ^{3/}	\$668,642,961	\$599,132,171	\$100,000	\$100,000	\$69,310,790
Total Costs	\$5,062,758,969	\$4,330,161,379	\$26,709,000	\$25,123,000	\$680,765,590

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

^{1/}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.

²/Represents total Federal obligations financed under authority of section 309(b), P.L. 90-537, Colorado River Basin Project Act, as amended by P.L. 97-373.

³/ 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 funding agreement 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 well as 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.

^{4/} Total to September 30, 2018, includes funds issued under the American Recovery and Reinvestment Act of 2009.

Cost Allocation and Methodology

Allocation	Allocation FY 2019	
Irrigation ^{1/}	\$1,418,544,209	\$1,417,828,725
Power	\$624,308,947	\$624,380,054
Municipal and Industrial Water	\$1,215,242,889	\$1,214,770,797
Recreation	\$129,597,777	\$128,827,398
Environmental Enhancements ^{2/}	\$288,000	\$288,000
Flood Control	\$124,526,133	\$124,631,565
Non-Indian Distribution Systems 3/	\$300,409,561	\$300,409,561
Indian Distribution Systems ^{4/}	\$914,269,221	\$929,699,221
Other ^{5/}	\$152,487,699	\$152,487,699
Unallocated Costs ^{6/}	\$164,673,949	\$169,435,949
Total	\$5,044,348,385	\$5,062,758,969

¹/FY 2020 includes \$996,274,057 for costs allocated to Indian irrigation which is eligible for deferral under the Leavitt Act, and \$422,270,152 for costs allocated to non-Indian irrigation.

⁴/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. ⁵/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 \$169,435,949 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. 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:

<u>Water Allocations</u>: 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 of the Interior (Secretary) announced a modified allocation and raised the Indian's priority for receiving water. The modified

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 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.

allocation also increased the amount of project water allocated as Indian Priority water to 309,828 acrefeet. 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 AWSA, which provides up to 667,724 acrefeet 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 AWSA 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 (BO) on the transportation and delivery of CAP water to the Gila River Basin.

The BO 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 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 BO 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, eight of which (Aravaipa Creek, Cottonwood Spring, Blue River, Bonita Creek, Hot Springs, Fossil Creek, Spring Creek, and West Fork of the Black River) have already been completed. The remaining four barriers are proposed to be completed within 15 years of the date of the finalized BO, with a minimum of three to be completed within each five-year period. The BO also proposed adding the 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 BO was received on May 15, 2008, which incorporated all of Reclamation's proposals as conservation measures. The Section 7 consultation was completed in 2008.

APPROPRIATION CEILING: The 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 CAP Authorization by Congress September 30, 1968. After 2007, all expenditures on the CAP 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 (Development Fund).

The AWSA amended the Act to authorize the Development Fund to be used as the funding mechanism for all authorized components of the AWSA. 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 AWSA. Beginning in January 2010, these funds were available without further appropriation for the specified purposes identified in the AWSA.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development -

<u>Upper Gila Division</u> - Continues oversight and administration of activities authorized by the AWSA associated with the New Mexico Unit and other water supply alternatives in southwestern New Mexico. Oversees payments to New Mexico as authorized by the AWSA. \$100,000

<u>Tucson Reliability Division</u> - Continues construction design, cost estimates and environmental analysis (National Environmental Policy Act [NEPA]) of reliability facilities, and development of operation and maintenance responsibilities for the Tohono O'odham Nation's San Xavier and Schuk Toak Districts.

\$1,040,000

<u>Indian Distribution Division - Gila River Indian Community (GRIC), Pima-Maricopa Irrigation Project (P-MIP)</u> - P-MIP is a joint works system that will convey water from the turnout on the CAP aqueduct

and water from the San Carlos Irrigation Project (SCIP) to the reservation lands to be served. 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. \$14,000,000

<u>San Carlos Apache Tribe</u> - Continues project designs of a Black River Diversion and Conveyance System project configuration. Continues NEPA activities (Environmental Impact Statement), cultural resource surveys, and mitigation requirements. \$5,000,000

<u>Yavapai Apache - Camp Verde</u> - Continues project designs, NEPA activities and the evaluation of alternatives. \$500,000

<u>Tohono O'odham - Sif Oidak</u> - Continues project designs and feasibility level analysis.

\$500,000

Total Indian Distribution Division \$20,000,000
Development Fund - AWSA (\$20,000,000)

0

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, and workers' compensation associated with injuries incurred during the construction of the CAP. Work also includes Coconino Dam site remediation and land disposal, updates to the PCE and project cost allocation. \$1,116,000

<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 FY 2013 are curated at the Huhugam Heritage Center. CAP collections made after FY 2013 are curated at the Center for Archaeology and Society at Arizona State University.

\$185,000

Native Fish Protection - Continues work with the FWS to meet legal requirements under Section 7 BO for the continued operations of the CAP canal including non-native fish eradication, native fish conservation, and the education and information program. Also, the Section 7 BO continues work on the placement, design, NEPA, monitoring and construction of fish barriers to protect federally listed fish species to ensure reliable and legal operation of the CAP.

Section 7 BO continues work on the placement, design, NEPA, monitoring and construction of fish barriers to protect federally listed fish species to ensure reliable and legal operation of the CAP.

Section 7 BO continues work on the placement, design, NEPA, monitoring and construction of fish barriers to protect federally listed fish species to ensure reliable and legal operation of the CAP.

Section 7 BO continues work on the placement, design, NEPA, monitoring and construction of fish barriers to protect federally listed fish species to ensure reliable and legal operation of the CAP.

Section 7 BO continues work on the placement, design, NEPA, monitoring and construction of fish barriers to protect federally listed fish species to ensure reliable and legal operation of the CAP.

Other Activities - Continues to maintain and develop mission-essential water resources core competencies and capabilities, 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 water resources challenges, including supply and demand imbalances, competing uses, issues associated with infrastructure limitations, and environmental water needs.

\$435,000\$

Subtotal, Water and Energy Management and Development

\$5,358,000

Land Management and Development –

<u>Recreation Development</u> – Coordination with local sponsors on management/use issues of existing facilities. Continues recreational development of approved public use facilities including regional parks and trail systems. \$200,000

Non-Federal Non-Cash Participation (\$100,000) \$100,000 Land Management - Continues 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. Develop and incorporate Geographic Information System processes into lands drawings and records. Continues coordination with the Bureau of Land Management (BLM), US Forest Service, and the Arizona State Land Department on collateral land use issues, 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. Provides coordination with other governmental agencies, including state, county, and municipal entities, on projects with potential to impact Reclamation's jurisdictional lands. Continues public trail development and management with Pima and Pinal Counties. \$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.

\$660,000

Non-Federal Cash Contributions: Various (\$122,000)

Subtotal, Facility Operations

\$538,000

\$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

\$6,392,000

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 operations, maintenance and replacement of the Main Outlet Drain (MOD), Main Outlet Drain Extension (MODE), and 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 laboratory services to support salinity calculations and YDP water quality.

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 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, 2017, this project is 96 percent complete. The 14 wells and associated features and the Protective and Regulatory Pumping Unit were completed in FY 1979, and an additional seven wells and associated features were completed in FY 1984. Additional wells and associated features will be constructed based on need. The Desalting Complex Unit was completed in FY 1991 and test operation of the main facility was completed and production of desalting water began in FY 1992. Flooding from the Gila River in 1993 resulted in damage to the conveyance infrastructure, requiring the YDP to cease operations. While necessary repairs were being made, relatively high flows on the River in the mid-to-late 1990s lessened the need to operate the YDP. Since that time, the YDP has been maintained, but not operated, except for a brief period in 2007, and for nearly one year between 2010-2011.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development ^{1/}	\$1,934,000	\$0
Facility Operations	\$11,962,000	\$12,774,000
Facility Maintenance and Rehabilitation	\$1,557,000	\$1,965,000
Request	\$15,453,000	\$14,739,000
Non-Federal	\$0	\$0
Prior Year Funds	\$1,245,162	\$0
Total Program	\$16.698,162	\$14,739,000
Prior Year Funds/Non-Federal	(\$1,245,162)	(\$0)
Total Reclamation Allotment	\$15,453,000	\$14,739,000

¹/Less funding is requested in Water and Energy Management and Development funding due to the completion of the 242 Wellfield Extension Project originally planned for completion in FY 2020.

Total Cost Information

	Total Estimated Cost	Total to 9/30/18	FY 2019	FY 2020	Balance to Complete
Reclamation	\$453,075,000	\$439,095,652	\$1,934,000	\$0	\$12,045,348
Adjustments	\$715,000	\$715,000	\$0	\$0	\$0
Total	\$453,790,000	\$439,810,652	\$1,934,000	\$0	\$12,045,348

Cost Allocation and Methodology

Allocation	FY 2018	FY 2019
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: 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: On December 10, 2014, Reclamation signed a Memorandum of Understanding (MOU) with the Lower Basin States of Arizona, California, and Nevada and the major municipal water agencies in each State to take initial steps towards generating additional water in

Lake Mead to reduce the risk of reaching critical reservoir elevations. The workgroup's objective was to aid in reducing further decline of Colorado River reservoirs by identifying, analyzing and recommending a set of options that collectively conserve at least 100,000 acre-feet of water annually in Lake Mead by reducing, replacing, or recovering a like amount of the bypass flows in a fiscally, legally, bi-nationally, and environmentally responsible manner. The workgroup evaluated all water flows and existing infrastructure in the greater Yuma, Arizona, area where the bypass flows originate. The workgroup completed their report in April 2016, which contains several recommendations and options to operate some or all of the facility and thereby reduced bypass flows. Such recommendations would require equipment replacements and upgrades if pursued.

WORK PROPOSED FOR FY 2020:

Facility Operations - Provides Information Technology (IT) related resources and services to administer, support, and manage the Distributed Control System (DCS), Yuma Area Control Systems and Services (YACSS) and Supervisory Control and Data Acquisitions (SCADA) system. YACSS/SCADA provides the central monitoring and control of wells, canal diversion/return facilities, and retention basins throughout the YDP and the Wellfields. The DCS enables remote control of the YDP equipment. Services provided include the purchase, installation, support, and contractual/license arrangements for IT resources, system and network administration, database administration, IT security activities, program management, and programming services.

Continues operations and management of water quality in compliance with 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 the Treaty. 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 acre-feet of water required for delivery to Mexico under the Treaty). Continues collaboration with interested stakeholders to evaluate the feasibility of the YDP as a tool to stretch water supplies on the Colorado River. Continues operation and routine maintenance of portions of the YDP and the Water Quality Improvement Center 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.

\$7,764,000

Continues operations and routine maintenance of the United States and Mexico sections of the 242 wellfield, conveyance and bypass systems required to meet Treaty requirements with Mexico. Water from the wellfield makes up a portion of the total deliveries to Mexico. Continues funding operation, maintenance, and upgrade activities for aging wellfields. Continues repairs, concrete panel replacement and upgrades for aging conveyances related to these wellfield structures. Continues quality assurance of maintenance activities. Continues inspections and reviews. Continues addressing Category 2 operations and maintenance recommendations from the Review of Operations and Maintenance report for the MODE which is a critical component of the drainage system for disposing of saline groundwater. These programs permit Reclamation to maintain acceptable salinity levels in the water supplies delivered to Mexico. The increase in funding is due to an offset from the decrease in Water and Energy Management and Development funding to cover additional maintenance responsibilities. \$4,238,000

Subtotal, Facility Operations

\$12,774,000

Facility Maintenance and Rehabilitation - Continues to identify extraordinary maintenance activities that are not typically addressed as part of the routine operation and maintenance program and are referred to as Major Rehabilitation and Replacement projects. The MODE, a concrete lined drainage structure that diverts Colorado River water to Mexico, and carries agricultural drainage water to the YDP, is a critical aging infrastructure that is in need of repair. Numerous locations of the MODE require removal of various redundant deteriorating structures, replacement of damaged sections of lined canal and restoration of unlined sections damaged in the 1993 Gila River flood. Replacement of these concrete canal panels on the MODE is required to keep the infrastructure in serviceable condition for potential operation of the YDP. It is a particularly challenging task due to the close proximity with critical agricultural areas throughout Yuma County. Upgrading the MODE ensures facility maintenance is in accordance with Review of Operation and Maintenance and Federal Facility Reliability Review.

Subtotal, Facility Maintenance and Rehabilitation

\$1,965,000

Reclamation Request

\$14,739,000

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 of the Interior'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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

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

(FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$3,803,000	\$2,303,000
Request	\$3,803,000	\$2,303,000
Non-Federal	\$0	\$0
Prior Year Funds	\$529,768	\$0
Total Program	\$4,332,768	\$2,303,000
Prior Year Funds/Non-Federal	(\$529,768)	(\$0)
Total Reclamation Allotment	\$3,803,000	\$2,303,000

Total Cost Information

	Total Estimated Cost	Total to 9/30/18	FY 2019	FY 2020	Balance to Complete
Reclamation	\$162,448,000	\$152,704,050	\$3,803,000	\$2,303,000	\$3,637,950
Adjustments ^{1/}	\$142,791,000	\$142,791,000	\$0	\$0	\$0
Total	\$305,239,000	\$295,495,050	\$3,803,000	\$2,303,000	\$3,637,950

^{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.

WORK PROPOSED FOR FY 2020:

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, destroy structures and put prime agricultural lands at risk. Install and begin monitoring of the Gould/Mule upland control structure aimed at mitigating the force of desert washes affecting the Colorado River, while providing for more control of the river channel and protection of structures, reducing annual repairs and sediment removal operations. These efforts fulfill regulatory requirements for keeping the waterways open and to enhance and protect fish and wildlife. 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. Complete work on the Yuma Mesa Conduit Extension groundwater conveyance system.

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 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 provides benefits to agriculture while enhancing and protecting 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. Long term drought 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.

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 \$382 million in quantified economic salinity damages to municipal and agricultural water users of the Colorado River in Arizona, California, and Nevada. This is a 62 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 \$236 million currently to \$618 million by 2035.

The Salinity Program receives a 30 percent cost share of the appropriated funds from the Upper Colorado River Basin Fund and the Lower Colorado River Basin Development Fund (Basin Funds). This allows for more projects in the Salinity Program to be completed.

Under the Basinwide Program, Reclamation is currently controlling approximately 214,000 tons of salt per year. Reclamation and its Basin State partners set a goal in 2017 for Reclamation to control 406,000 tons of salt in the Basinwide Program per year by FY 2035. For Reclamation to meet this target it needs to implement another 192,000 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, 2017, based on the current tons of salt control, the Program is estimated to be 47 percent complete. As of September 30, 2018, Reclamation has expended 76 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

	FY 2019	FY 2020
Activity	Enacted	President's Budget
Water and Energy Management and Development	\$8,000,000	\$10,000,000
Request	\$8,000,000	\$10,000,000
Non-Federal	\$3,429,000	\$4,286,000
Prior Year Funds	\$61,254	\$0
Total Program	\$11,490,254	\$14,286,000
Prior Year Funds/Non-Federal	(\$3,490,254)	(\$4,286,000)
Total Reclamation Allotment	\$8,000,000	\$10,000,000

Total Construction Costs to be allocated

	Total Estimated Cost 1/	Total to 9/30/18	FY 2019 Enacted	FY 2020 President's Budget	Balance to Complete
Reclamation	\$654,124,000	\$494,172,000	\$8,000,000	\$10,000,000	\$141,952,000
Cost-Sharing ^{2/}	\$280,339,000	\$211,788,000	\$3,429,000	\$4,286,000	\$60,836,000
Total	\$934,463,000	\$705,960,000	\$11,429,000	\$14,286,000	\$202,788,000

^{1/} Total Estimated Cost represents current authorized indexing.

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 \$654.1 million (October 2020 projected price levels). The amount of the ceiling remaining in the Federal obligation for the Title II programs and projects is \$142 million. This authorization (with indexing) is adequate to complete about 76 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

^{2/} Cost-share portion for the Basinwide Program advanced from the Basin Funds. 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.

ceiling may be needed to complete the Title II Program as authorized. Current commitments will be held within the existing ceiling.

WORK PROPOSED FOR FY 2020:

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 million 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.

\$14,286,000 (\$4,286,000)

Non-Federal (Upper and Lower Colorado River Basin Funds)

4,286,000)

Subtotal, Water and Energy Management and Development

\$10,000,000

Reclamation Request

\$10,000,000

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.

The Navajo-Gallup Water Supply Project and the Animas-La Plata Project, both being CRSP Section 5 projects, are listed separately as individual projects. In addition, the Glen Canyon Unit, Navajo Unit (a CRSP Section 5 and Section 8 project), and Wayne N. Aspinall Unit are listed separately under CRSP Section 8. The Navajo Indian Irrigation Project is funded by the Bureau of Indian Affairs but is being built by Reclamation. Funding from revenues produced by these projects for power and related features of the CRSP is 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. Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, 2019, Title V, Sec. 505.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Number of Threatened or Endangered species recovery activities implemented

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$1,439,000	\$1,230,000
Land Management and Development	\$2,021,000	\$1,697,000
Fish and Wildlife Management and Development*	\$53,000	\$226,000
Facility Operations	\$6,391,000	\$5,507,000
Facility Maintenance and Rehabilitation	\$1,431,000	\$1,341,000
Enacted/Request	\$11,335,000	\$10,001,000
Non-Federal	\$3,826,000	\$3,276,143
Prior Year Funds	\$1,196,327	\$0
Total Program	\$16,357,237	\$13,277,143
Prior Year Funds/Non-Federal	(\$5,022,327)	(\$3,276,143)
Total Reclamation Allotment	\$11,335,000	\$10,001,000

WORK PROPOSED FOR FY 2020:

Bonneville Unit, Central Utah Project – Continues 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, grant 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. Increase is due to realignment of resource management priorities. Begins work to prevent the spread of Quagga Mussels and other aquatic invasive species in the system. As a new and emerging threat to Reclamation facilities administered by the Provo Area Office, these funds will be used to reduce the risk of infestation. Increase due to new work to prevent the spread of Quagga Mussels. 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 Operation Plans. Continues revision to project facilities Emergency Action Plans and Standard Operating Procedures. Continues contract obligation of Reclamation to pay the Central Utah Water Conservancy District costs assigned to O&M. Increase in funding is due to a substantial increase in the costs associated with the need to replace and rehabilitate aging infrastructure. Continues oversight of operation and maintenance on project facilities being operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program. \$3,470,000 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 land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. Decrease is due to a realignment of project priorities and project coordination programs. 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, Emergency Action Plan activities, and dam tender training for Silver Jack Dam. Continues instrumentation data review and maintenance. Continues annual examinations of existing dam, reservoir, spillway and outlet works structures for identification of O&M deficiencies and dam safety concerns.

Colorado River Storage Project (Initial Units) – Continues Office of Worker's Compensation Program payments. Continues management, oversight, and administration of the project. Continues to monitor Ute Ladies' Tresses (a threatened plant) per the Biological Opinion requirements for operation of Flaming Gorge Dam and Reservoir. \$50,000

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. Begins work on the control of the Quagga and Zebra Mussels on the Ridgway Reservoir. Continues land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. Continues O&M of Ridgeway Dam and Reservoir facilities and associated grounds, Standing Operating Procedures, water supply forecasting, hydrologic database activities, Emergency Action Plan tasks, flood control operations, and dam tender training. Continues inventory, inspection, and maintenance of a Type 2 bridge, which is Reclamation owned and is not located on a public road across the spillway stilling basin. Continues 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. \$455,000

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 land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. Begins inundation mapping of project features. Continues Emergency Action Plan 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. Begins program development and coordination of regional database and oversight of the Geographical Information System. Continues inventory, inspection, and maintenance of bridges;

instrumentation maintenance and data review; and examination of existing structures to ensure public safety through identification of O&M deficiencies and dam safety concerns. Increase is due to development of metadata for the National Geospatial Data Clearinghouse as part of the National Spatial Data Infrastructure.

\$1,414,143

Non-Federal (Upper and Lower Colorado River Basin Development Fund) (\$215,143)

\$1,199,000

Eden Project – Continues tasks to ensure protection of project water rights from the activities of others that may adversely affect project operations. Continues oversight and administration of contract repayment. 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 the National Environmental Policy Act, 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 Operation Plans. Continues revisions to project facilities Emergency Action Plans and Standing Operating Procedures. Continues oversight of operation and maintenance on project facilities being operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program.

Emery County Project - Continues tasks to ensure protection of project water rights from the activities of others that may adversely affect project operations. 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. Less funding is required due to lower program development efforts due to changes in program objectives. 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. Increase is due to increased efforts to develop Geographical Information System for project features. Continues assistance to local governments and emergency management personnel in the development and revision of local Emergency Operation Plans. Continues revisions of facility Standing Operating Procedures. Continues oversight of operation and maintenance of project facilities being operated and maintained by water user entities. Continues oversight and annual review under the Examination of Existing Structures Program. Less funding is required due to a realignment of project-based priorities as a result of planned changes in scheduled project requirements. \$492,000

Florida Project – Continues basic water quality monitoring, administration of the project repayment contract, and water petitions. Continues land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. Increase is due to realignment of project priorities and project coordination programs. Begins program development and coordination of regional database and oversight of the Geographical Information System. Continues operation and maintenance (O&M) of automated data

collection system activities and facilities including Lemon Dam and associated grounds, Emergency Action Plan tasks, dam tender training, and identification of O&M deficiencies and dam safety concerns. Increase is due to development of metadata for the National Geospatial Data Clearinghouse as part of the National Spatial Data Infrastructure. Continues inventory, inspection, and maintenance of bridges. Continues instrumentation maintenance and data review, and examination of existing structures.

\$336,000

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 land management activities which consist of complying with and administering laws and regulations, execution of agreements, contracts, and outgrants or other agreements for the use and management of lands and land resources. Continues to provide National Environmental Policy Act compliance in association with public crossing requests. Increase is due to realignment of project priorities and project coordination programs. - Begins program development and coordination of regional database and oversight of the Geographical Information System. Continues Emergency Action Plan tasks, Hammond Diversion Dam operator's training, and operation and maintenance (O&M) technical assistance. Increase is due to development of metadata for the National Geospatial Data Clearinghouse as part of the National Spatial Data Infrastructure. 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. \$217,000

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 recreation rehabilitation activities at Red Fleet 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, outgrant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. Less funding is requested and the Non-Federal cost share is lower due to change in priority of recreation rehabilitation activities from Red Fleet Reservoir to the newly re-acquired recreation contract at Echo Reservoir. This change aligns the Non-Federal funding to the Weber River Project. Continues assistance to local governments and emergency management personnel in the development of local Emergency Action Plans and Standing Operating Procedures. 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. \$306,000

Lyman Project – Continues tasks to ensure protection of project water rights from the activities of others that may adversely affect project operations. 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 the National Environmental Policy Act, and outgrant and agreement processing. Continues assistance to local governments and emergency management personnel in the development of local Emergency Operations Plans. Continues revision to project facilities Emergency Action Plans and Standing Operating Procedures. Increase in funding request due to a realignment of program priorities to address out-of-date inundation maps and inadequate inundation study elevation data. 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.

Navajo Unit – Begins work on the control of the Quagga and Zebra Mussels on the Navajo Reservoir. Increase is due to the activities associated with controlling the Aquatic Nuisance Species. Continues

O&M cost-share of the recreation facility, O&M of automated data collection system activities, O&M of facilities and associated grounds, Emergency Action Plan tasks, and dam tender training.

\$562,000 (\$232,000)

Non-Federal (State of Colorado)

\$330,000

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 land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. Continues Emergency Action Plan tasks, dam tender training at 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 identification of O&M deficiencies and Paonia Dam safety concerns.

\$346,000 (\$6,000)

Non-Federal (State of Colorado, Division of Parks and Outdoor Recreation)

\$340,000

San Juan-Chama Project – Continues oversight and management of repayment contracts for 18 water user entities who receive approximately 74,000 acre-feet of water from the project each year. 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 Operation and Maintenance (O&M) activities in compliance with the Clean Water Act and National Environmental Policy Act and follows good integrated pest management practices. Specific planned activities include monitoring of sediment management at the diversion dams. Increase is due to additional sediment removal activities 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 2020 include a Comprehensive review and exercise for Heron Dam and an annual site inspection for Nambe Falls Dam. 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 Dam and the diversions, O&M support for Nambe Falls Dam, and investigation/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. Increase is due to major repairs to the diversion dams. \$3,130,000

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, and Village of Taos Ski Valley.

(\$2,500,000)

\$630,000

Seedskadee Project – Continues tasks to ensure protection of project water rights from the activities of others that may adversely affect project operations. Continues oversight and administration of contract repayment. Completes integrated pest management activities at Fontenelle Reservoir. Less funding is required due to a realignment of project priorities regarding weed control. 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.

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. Increase is due to the activities associated with controlling the Aquatic Nuisance Species. Continues land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. Increase is due to realignment of project priorities and project coordination programs. Continues operation and maintenance (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, Emergency Action Plan tasks, and dam tender training at 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 identification of operation and maintenance deficiencies and dam safety concerns. \$645,000

Non-Federal (State of Colorado, Division of Parks and Outdoor Recreation) (\$180,000)

\$465,000

Smith Fork Project – Continues periodically scheduled water quality monitoring. Continues tasks required to ensure the delivery of project water and benefits which include 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 land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. Increase is due to realignment of project priorities and project coordination programs. Continues O&M of project facilities and associated lands, Emergency Action Plan 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 identification of operation and maintenance deficiencies and dam safety concerns. \$515,000

Non-Federal (State of Colorado, Division of Parks and Outdoor Recreation) (\$143,000)

\$372,000

Vernal Unit, Utah Project – Continues tasks to ensure protection of project water rights from the activities of others that may adversely affect project operations. Continues oversight and administration of contract repayment. Continues management, oversight, and coordination activities for the project. Continues land resources management, to include asset inventory system database management, Geographic Information System activities, 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. 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 Operation Plans. Continues revision to project facilities Emergency Action Plans and Standing Operating Procedures. Increase is a result in realignment of project-based priorities as a result of planned changes in scheduled project requirements. 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. Increase is due to additional extraordinary maintenance activities.

\$485,000

Reclamation Request \$10,001,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects Repayment of Irrigation Investment

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.

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: In 2017 Reclamation completed the Long-Term Experimental and Management Plan (LTEMP) Environmental Impact Statement for operations at Glen Canyon Dam pursuant to the Glen Canyon Protection Act of 1992. A Record of Decision (ROD) was signed in December 2016 and LTEMP implementation began in January 2017. Reclamation has also completed the Endangered Species Act (ESA) Section 7 consultation and a new Biological Opinion (BiOp) is in place. The National Historic Preservation Act (NHPA) Section 106 consultation is ongoing per the LTEMP Programmatic Agreement and Historic Preservation Plan.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Number of Threatened or Endangered species recovery activities implemented

Mission Area 6: Modernizing Our Organization and Infrastructure for the Next 100 Years Goal #3: Prioritize DOI infrastructure needs and reduce deferred maintenance backlog

Measure: Percent of museum collections on DOI inventory in good condition

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Land Management and Development	\$390,000	\$310,000
Fish and Wildlife Management and Development	\$2,957,000	\$2,768,000
Enacted/Request	\$3,347,000	\$3,078,000
Non-Federal	\$0	\$0
Prior Year Funds	\$298,349	\$0
Total Program	\$3,645,349	\$3,078,000
Prior Year Funds/Non-Federal	(\$298,349)	\$0
Total Reclamation Allotment	\$3,347,000	\$3,078,000

APPROPRIATION CEILING: The Glen Canyon Unit was originally authorized by P.L. 84-485 in 1956 as part of the Colorado River Storage Project. No separate appropriation ceilings have been kept for individual units of the project. The Glen Canyon Dam and Power Plant were completed in 1966. Archeological collections were made as mitigation for the existence of the project and ongoing costs of curation are also included here. In 1973, the ESA was enacted adding new requirements from U.S. Fish and Wildlife Service Biological Opinions. All costs related to this effort are required by "general legislation" and thus have no appropriation ceiling requirements.

WORK PROPOSED FOR FY 2020:

Land Management and Development -

<u>Glen Canyon Unit</u> - Continues collection management tasks of Glen Canyon archaeological collections of the Museum of Northern Arizona, Utah Museum of Natural History, Museum of New Mexico, and the Anasazi Heritage Center. Compliance measures include cultural sensitivity training, support for the development of a Historic Preservation Plan, monitoring and possible mitigation measures.

\$200,000

Navajo Unit - Continues recreation rehabilitation in New Mexico. \$110,000

Subtotal, Land Management and Development

\$310,000

Fish and Wildlife Management and Development -

Glen Canyon Unit - Continues implementation of commitments under the LTEMP ROD, BiOp, and Programmatic Agreement. The LTEMP ESA compliance measures are defined in the 2016 LTEMP BiOp and include monitoring of endangered Humpback Chub and Razorback Sucker, as well as non-native fish control. Previous conservation measures were continued or enhanced. New conservation measures for endangered Humpback Chub and Razorback Sucker are in compliance with ESA. Additional and ongoing NHPA Section 106 compliance measures for LTEMP are outlined in the LTEMP NHPA Section 106 Programmatic Agreement and Historic Preservation Plan which addresses monitoring, mitigation, discovery and consultation processes as required under Section 106. \$2,498,000

<u>Wayne N. Aspinall Unit</u> - Continues oversight and management of the contract for Hotchkiss Fish Hatchery operations \$270,000

Subtotal, Fish and Wildlife Management and Development

\$2,768,000

Reclamation Request

\$3,078,000

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 (Basin States) within the 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 Lower 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 including species of cyanobacteria that have the potential to produce toxins that are harmful to humans and wildlife. Recent warmer year-round water temperatures in the Colorado River and its reservoirs also favor less desirable phytoplankton, several species of which are toxic to fish, wildlife, and humans who may consume its water prior to municipal treatment. Prevention is much more cost effective than treatment after invasive species, salt, and anthropogenic contaminants enter the river system, so 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 2018-2022:

Mission Area 1: Conserving our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$240,000	\$240,000
Request	\$240,000	\$240,000
Non-Federal	\$0	\$0
Prior Year Funds	\$2,672	\$0
Total Program	\$242,672	\$240,000
Prior Year Funds/Non-Federal	(\$2,672)	(\$0)
Total Reclamation Allotment	\$240,000	\$240,000

Total Cost Information

	Total Estimated Cost	Total thru 9/30/18	FY 2019	FY 2020	Balance to Completion
Reclamation	\$15,500,000	\$11,696,087	\$240,000	\$240,000	\$3,323,913
Adjustments ^{1/}	\$198,808	\$198,808	\$0	\$0	\$0
Total	\$15,698,808	\$11,894,087	\$240,000	\$240,000	\$3,323,913

¹/Includes funding from Las Vegas Valley Water District (LVVWD) in prior years.

WORK PROPOSED FOR FY 2020:

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 from Lake Mead to the Northerly International Boundary with Mexico. Continues work 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 program verification, monitoring, evaluation, and coordination activities with Colorado River stakeholders such as city, State, Tribes, and other Federal agencies. Provides representation on the Lake Mead Water Quality Forum.

Reclamation Request \$240,000

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 \$382 million per year. The salinity program is designed to meet the objectives of the Colorado River 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

- 1 9- 11-11			
Activity	FY 2019	FY 2020	
Activity	Enacted	President's Budget	
Water and Energy Management and Development	\$700,000	\$500,000	
Request	\$700,000	\$500,000	
Non-Federal	\$0	\$0	
Prior Year Funds	\$0	\$0	
Total Program	\$700,000	\$500,000	
Prior Year Funds/Non-Federal	\$0	\$0	
Total Reclamation Allotment	\$700,000	\$500,000	

WORK PROPOSED FOR FY 2020:

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.

Reclamation Request \$500,000

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 ensures compliance with Section 7(a)(2) of the Endangered Species Act (ESA) by conducting consultations and implementing actions as required by Fish and Wildlife Service (FWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries (together "the Services") Biological Opinions (BiOp). The NOAA BiOp has a long-standing history of litigation and there have been several remand orders and associated new or supplemental BiOps. FWS litigation history is shorter, nevertheless litigation is driving the development of new a BiOp with NOAA in 2019. This BiOp will be an interim two-year BiOp (2019-2020) to bridge the time until the Columbia River System Operations National Environmental Policy Act (NEPA) process is completed in 2020, pursuant to section 6 of the October 19, 2018 Presidential Memorandum, Promoting the Reliable Supply and Delivery of Water in the West. The preferred action from that NEPA process will serve as the basis for new long term BiOps, post 2020. 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 new BiOp is expected to continue the actions described in previous BiOps. Litigation by outside parties challenging the BiOps will likely continue.

Reclamation is one of three action agencies that consults on operations of the Federal Columbia River Power System (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 BiOps are the Southern Resident killer whales, Southern Distinct Population Segment of green sturgeon, and eulachon. These BiOps require extensive actions to ensure that operation of the FCRPS by the agencies is not likely to jeopardize the continued existence of endangered or threatened species, or to adversely modify or destroy their designated critical habitats. 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. This program also funds Reclamation actions included in Fish Accord 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 Section 7(a)(2) of the Endangered Species Act (ESA) and resultant BiOps.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Fish and Wildlife Management and Development	\$20,300,000	\$16,000,000
Enacted/Request	\$20,300,000	\$16,000,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$20,300,000	\$16,000,000
Prior Year Funds/Non-Federal/Other Federal	\$0	\$0
Total Reclamation Allotment	\$20,300,000	\$16,000,000

Total Cost Information*

	Total Estimated Cost	Total to 9/30/18	FY 2019 Enacted	FY 2020 President's Budget	Balance to Complete
Reclamation	N/A	\$326,666,368	\$20,300,000	\$16,000,000	N/A
Non-Federal	N/A	N/A	N/A	N/A	N/A
Total	N/A	\$326,666,368	\$20,300,000	\$16,000,000	N/A

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

Cost Allocation and Methodology

Allocation	FY 2019 Enacted	FY 2020 President's Budget
Fish and Wildlife 1/	\$20,300,000	\$16,000,000
Total	\$20,300,000	\$16,000,000

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 2020:

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 the 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.

\$2,888,000

<u>Hydro Actions - 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 FCRPS BiOps. <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. \$6,105,000

<u>Habitat</u> - Continues technical assistance for actions to enhance tributary spawning and rearing habitats required by the BiOps to off-set 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, culverts, and flood plains). Continues to support Reclamation's participation with Tribes and other locally-based partners to improve habitat for salmon and steelhead in the Columbia River tributaries. Continues Reclamation's habitat program with participation in approximately 30 site-specific habitat improvement projects per year. \$5,912,000

Research, Monitoring, and Evaluation (RM&E) - Continues a long-term effectiveness and compliance monitoring program to ensure 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 State, Tribal, and Federal partnership to increase the accuracy, collection efficiency, and the transferability of the data across government programs. These programs are multi-agency efforts or in cooperation with local stakeholders and landowners to ensure the design and construction of tributary habitat improvement projects are effective.

<u>Hatcheries</u> - Reclamation expects to fund actions that modify FCRPS hatcheries if such activities can reduce adverse impacts to listed species. These actions are expected to reduce the detrimental impacts of artificial production on wild stocks of salmon and steelhead. \$1,088,000

Reclamation Request \$16,000,000

SEE APPENDIX FOR: Benefit Cost Ratios as of October 2018

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 two reservoirs, three Grand Coulee power plants and one pump-generating plant (PGP) with a combined generating capacity of 6.8 million kilowatts and an annual generation of approximately 21 billion kilowatt-hours, and associated switchyards, transmission lines, feeder canal, and canal systems. In addition, there are 27 generators, six pumping units, and six pump generators on the Projects. 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, Billy Clapp Lake, Pinto Dam, the Main Canal the East Low Canal, 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. The project provides approximately 3.8 million acre-feet of water on an average annual basis. 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.

Bonneville Power Administration (BPA), through a separate Memorandum of Agreement, directly funds power operation and maintenance (O&M) costs. In addition, BPA directly funds, through subagreements, major power replacements, additions, and improvements at Grand Coulee Dam and power plants. The Grand Coulee Visitor's Center and other recreation features of the project regularly attract over 130,000 annual recreational visitors.

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 Sts. 1187; Columbia Basin Project Act of March 10, 1943; P.L. 89-448, Third Power Plant, Grand Coulee Dam, June 14, 1966; 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; P.L. 93-205, Endangered Species Act of 1973, December 28, 1973, as amended; 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measures: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$4,938,000	\$2,066,000
Land Management and Development	\$2,973,000	\$3,210,000
Fish and Wildlife Management and Development	\$25,000	\$20,000
Facility Operations	\$4,025,000	\$3,945,000
Facility Maintenance and Rehabilitation	\$9,298,000	\$11,422,000
Request	\$21,259,000	\$20,663,000
Non-Federal	\$11,062,000	\$12,754,000
Other Federal – BPA Direct Funding	\$131,886,000	\$122,570,000
Other Federal – BPA Subagreement	\$82,564,000	\$43,513,000
Other Federal – BPA Small Capital	\$4,000,000	\$4,000,000
Prior Year Funds	\$0	\$0
Total Program	\$250,771,000	\$203,500,000
Prior Year Funds/Non-Federal/Other Federal	(\$229,512,000)	(\$182,837,000)
Total Reclamation Allotment	\$21,259,000	\$20,663,000

WORK PROPOSED FOR FY 2020:

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 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. Continues program management support for planning activities relative to coordination of interests among local, State, tribal and other Federal agencies, water users, irrigation districts, industries, other private sector organizations and environmental groups. This coordination addresses emerging water, land and other resource management issues in watersheds in the State of Washington. Continues Potholes Supplemental Feed Route project management, planning, project implementation, and monitoring to meet water contract agreements with the three irrigation districts, honors environmental and cultural resource commitments, and coordinates with the State of Washington to address increased demands for feed water. Other - 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. Continues to provide resources to monitor unauthorized use of water. Continues management support for planning activities. Continues support for the Odessa Ground Water Replacement Program (OGWRP) which continues phased development of the Columbia Basin Project to deliver surface water to lands that are currently using groundwater in the Odessa Groundwater Management Subarea. Less funding is requested due to various projects being fully funded in the previous year.

\$2,091,000

Non-Federal - Various

(\$25,000)

Subtotal, Water and Energy Management and Development

\$2,066,000

Land Management and Development - Continues land management activities including environmental compliance, resolving trespass issues, resolving encroachment disputes, conducting field reviews of the Project lands and rights-of-way, 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, maintaining existing land records, controlling noxious weeds through integrated pest management programs and resolving soil and moisture conservation problems. Continues land surveys of Project lands to ensure no encroachment on public lands around Lake Roosevelt. Continues Geographic Information System activities. Continues administration of the settlement land program. Continues administering the grazing program, cleaning up dump sites that may contain hazardous waste and conducting surveys for cultural resources and hazardous materials relating to all public inquiries. Continues payment in lieu of taxes with Memorandums of Understanding with three counties, Adams, Grant, and Franklin. Reclamation Recreation Management Act, Title XXVIII -Continues the accessibility requirements to improve Coulee City Park to meet the Americans with Disabilities Act (ADA) compliance including improvements to install ADA accessible parking and create and finish walkways and paths throughout the park that will connect to other trails in the area. This work will be implemented through a cost-share partnership with Coulee Area Parks and Recreation District. \$3,410,000

Non-Federal - Coulee Area Parks and Recreation District

(\$200,000)

3,000,

Subtotal, Land Management and Development

\$3,210,000

Fish and Wildlife Management and Development - Continues involvement to respond to requests from natural resource agencies for operational data relevant to fish and wildlife. Continues negotiation for Interagency Agreement with Fish and Wildlife Service to encompass fish collection, laboratory analysis, and report findings. Continues review and preparation of environmental compliance documents and checklists for proposed minor actions from natural resource agencies. Continues interagency coordination on work conducted by others that may affect Project operations or facilities. Continues review of other agencies' National Environmental Policy Act documents and plans which may affect Project operations. Continues assistance to non-Reclamation entities for resource monitoring and inventory efforts.

\$20,000

Facility Operations - Continues day-to-day operations of two storage dams and reservoirs, a pump and generating plant, and a 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 O&M of Project facilities including stream gaging on natural waterways in the Columbia Basin and related portions of the facility, information technology, and Supervisory Control and Data Acquisition system security. Continues day-to-day O&M of recreational facilities at Scooteney and Summer Falls Parks, including day use areas, camping, swimming, and boat ramp facilities.

Power Items - Begins replacement of PGP cooling water strainers. The current strainers do not operate efficiently, causing the pumps to be taken out on clearance to clear the strainers. Continues day-to-day O&M of the Left Power House (LPH), Right Power House (RPH), and Third Power Plant (TPP) and associated transmission facilities under a direct funding agreement with BPA. Continues LPH fire alarm upgrade and replacement. Continues design efforts for RPH fire alarm replacement. Continues design efforts for fire alarm upgrades in the switchyards. The existing fire alarm control panels and components are outdated. Continues LPH bypass valve and piping replacement. Current bypass valves are original equipment and are starting to fail. Continues pre-construction activities and project management of TPP overhaul units G19-21. Continues maintenance items including TPP cavitation repairs, fixed wheel gate refurbishment, and overhaul of units G22-24. Continues to implement review recommendations for corrective actions around the Grand Coulee Project. Continues the implementation of world class hydro efforts. Several specific improvement areas have been identified and it is anticipated that these improvements will enhance productivity, safety and reliability at the Grand Coulee Project. Continues repainting of G1-18 penstocks and replacement of bypass valves and piping. Continues the recoating of the interior and exterior of 12 discharge tubes in the PGP. Existing interior coating is missing or has deteriorated, creating the potential for metal to be exposed, which could lead to failure of discharge tubes. Continues extraordinary maintenance on the isolated phase bus that runs between units G1-3 to the PGP. This provides power to operate pump units P1-6. Continues with refurbishment or replacement of the PGP reverse flow/coaster gates, as well as contract, construction, project support and oversight of the associated bypass valve and piping replacements. Continues Columbia River System operation review with a corresponding Environmental Impact Statement (EIS). The EIS will evaluate alternatives for longterm system operations and impacts on the Federal Columbia River Power System. The EIS is scheduled for completion by the end of 2020, pursuant to section 6 of the October 19, 2018 Presidential Memorandum, Promoting the Reliable Supply and Delivery of Water in the West. 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. Completes the TPP G22-24 oil cooler replacement. Completes the LPH and RPH heating ventilation and air conditioning systems upgrade. Completes the RPH Battery Board Replacement. \$143.044.000

Non-Federal - Water Users (\$12,529,000)
Other Federal - BPA Direct Funding (\$122,570,000)
Other Federal - BPA Small Capital (\$4,000,000)

Subtotal, Facility Operations

\$3,945,000

Facility Maintenance and Rehabilitation - Resumes the construction of a wastewater pump back system at Leavenworth National Fish Hatchery. The system will supply necessary water when water resources have been depleted, particularly at the end of summer. This project falls under the 2015 Biological Opinion (BiOp) and ensures ongoing compliance. As part of required mitigation due to the construction and operation of Grand Coulee Dam, work resumes toward rehabilitation of the Leavenworth surface water intake and delivery system. This will ensure reliability in bringing water from Icicle Creek to produce salmon at the Leavenworth Fish Hatchery. Resumes PPL 5.8 Wasteway improvements. Resumes design and fabrication of the drum gate floating bulkhead structures that can attach to the dam and seal a single gate from the reservoir enabling maintenance to occur independent of the water elevation. Begins block 31 freight/passenger elevator refurbishment and modernization. This elevator has been in operation since 1941, has never been modernized and is not in compliance with current elevator fire and safety codes. Begins interior and exterior improvements of the procurement building, in accordance with the ADA. If the rest rooms are not brought up to accessibility standards, they will be in violation of the Architectural Barriers Act and Section 504 of the Rehabilitation Act. Begins replacement of the drum gate and actuator. This equipment provides for operation of the drum gates which are critical to controlling water operations on the Columbia River, especially during the spring and summer runoff.

Continues finalizing a design solution for the Trail Lake section of the Main Canal; delaying possible solutions may result in increased maintenance costs and possible failure of this section of the canal. Continues mitigation for cultural resource sites on Lake Roosevelt. These actions are required due to Section 106 of the National Historic Preservation Act. Continues rehabilitation of the ring seal gates in the dam to prevent water from leaking through the old seals. The gates provide reliability for movement of water when required to maintain flood control elevations on Lake Roosevelt. Continues the Leavenworth well field reconfiguration. As part of the 2015 BiOp, the Leavenworth Fish Hatchery is required to reduce surface water right use from 42 cubic feet per second (cfs) to approximately 20 cfs. To meet this target, groundwater production must be increased significantly. Groundwater has higher water quality and lower temperature than surface water, allowing for recirculation in the planned circular tank system, this increase must be quantified to determine the design flow for the new surface water intake and fish screen. As a condition of the BiOp, the increased groundwater production must be in place by 2023. Continues construction of the Leavenworth rearing units (tanks). These rearing units will help address aging infrastructure issues at the hatchery while providing capability to reduce surface water diversions and phosphorus discharge (issues at the core of ongoing and potential future litigation). This project also falls under the 2015 BiOp. Failure to comply with the BiOp may result in fines and additional litigation. Continues replacement of PGP governors, exciters, protective relays, and unit controls. The existing equipment is beyond its useful life. Maintenance requirements have increased significantly, and spare parts are no longer available for the equipment. The replacement will provide needed reliability and create a cost savings from reduced maintenance efforts. Continues replacement of small tools and movable equipment directly related to the power generation of the facility. Tools and equipment are past their service life and are causing quality control issues. Increase due to additional funding associated with construction contracts within the PGP for the replacement of governors, exciters, protective relays and unit controls as well as Operations and Maintenance funding for Leavenworth activities.

Power Items - Continues KP10A/B Transformer replacement. Keys modernization wear and tear on equipment in the Keys PGP has resulted in increasing maintenance and modernization needs that must be addressed to ensure that the plant continues to meet its authorized purposes. Continues replacement of transformers on units G11-18. Existing transformers need replacement as they are beyond their useful life. If not replaced, generation of the unit could be lost. Continues replacement of G1-18 stator windings, cores and spares. The existing equipment is beyond its useful life and requires replacement. If this equipment is not replaced, the ability to produce power could be jeopardized and employee safety may be compromised. Continues G1-18 static exciter replacement. Existing excitation system is beyond its useful life and parts are no longer being manufactured. Continues G1-18 governor replacement. Parts for the existing governor system are no longer available, this reduces the reliability of these units to produce power for irrigation pumping and power system requirements itself. Completes the replacement of the Supervisory Control and Data Acquisition System. This system provides for operation and control of the facility to provide power generation and water benefits. The existing system is past its service life and parts are no longer in production and unable to be manufactured. Completes LPH/RPH crane controls upgrade. Modernization or replacement of four bridge cranes is needed before the G1-18 modernization project begins. \$54,935,000

Other Federal - BPA Subagreement

(\$43,513,000)

Subtotal, Facility Maintenance and Rehabilitation

\$11,422,000

Reclamation Request

\$20,663,000

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 (OPRD), pest management, resolving boundary issues, environmental audits, water conservation measures, and activities related to unauthorized use of water. This project provides about 115,000 acrefeet of irrigation water to approximately 23,000 acres each year. 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. The project hosts about 577,000 recreational visitors each year.

AUTHORIZATION: P.L. 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. 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; P.L. 97-293, Reclamation Reform Act of 1982, as amended; 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 Fiscal Years 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$64,000	\$78,000
Land Management and Development	\$127,000	\$239,000
Fish and Wildlife Management and Development	\$77,000	\$127,000
Facility Operations	\$454,000	\$417,000
Facility Maintenance and Rehabilitation	\$3,000	\$3,000
Request	\$725,000	\$864,000
Non-Federal	\$225,000	\$301,000
Prior Year Funds	\$0	\$0
Total Program	\$950,000	\$1,165,000
Prior Year Funds/Non-Federal/Other Federal	(\$225,000)	(\$301,000)
Total Reclamation Allotment	\$725,000	\$864,000

WORK PROPOSED FOR FY 2020:

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 with districts to encourage efficient use of water supplies and water conservation that aids in the protection of threatened and endangered species within the project. 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. Other - Continues activities related to the elimination of unauthorized use of water.

\$103,000

Non-Federal - Various

\$25,000)

Subtotal, Water and Energy Management and Development

\$78,000

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 irrigation districts, OPRD, U.S. Forest Service, and the Bureau of Land Management. 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 the facilities are federally owned and under Reclamation's jurisdiction. Reclamation Recreation Management Act, Title XXVIII – Begins replacement of the existing restroom building and underground sewage system in the main campground at Prineville Reservoir State Park. Increase due to a new Americans with Disabilities Act cost-share grant with OPRD for restroom building and underground sewage system replacement.

\$339,000
Non-Federal - (OPRD)

Subtotal, Land Management and Development

\$239,000

Fish and Wildlife Management and Development - Continues to develop new fish flow management criteria for the Crooked River in consultation with National Oceanic and Atmospheric Administration (NOAA) Fisheries and the U.S. Fish and Wildlife Service (USFWS) as directed by the Crooked River Collaborative Water Security Act of 2014. 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 consultation with NOAA Fisheries and the USFWS on project operations. Continues coordination with the Deschutes Basin Board of Control and the City of Prineville on habitat conservation planning activities and implementation requirements of the 2005 NOAA Fisheries BiOp on project operations under Sections 7(a)(2) and 10(j) of the Endangered Species Act (ESA). Failure to implement actions could result in difficulty completing the consultation after reinitiation. Reclamation staff will participate in the Deschutes Basin Habitat Conservation Plan (HCP) process to review and comment on the HCP development issues giving Reclamation the ability to participate in the outcome of the ESA reconsultation. Increase due to labor requirements to comply with the mandates of the BiOp implementation. \$127,000

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 (O&M). This includes stream gauging, hydromet system O&M costs, and cyclical revisions to emergency action plans. Continues day to day land and recreation management activities at Prineville Reservoir under a 50 percent cost-share agreement with OPRD. Continues implementation of the 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.

\$593,000

Non-Federal – Oregon Parks and Recreation Department

(\$176,000)

Subtotal, Facility Operations

\$417,000

Facility Maintenance and Rehabilitation - Continues required annual completion of high and significant hazard dams reviews and examinations (annual site inspections, periodic facility reviews, etc.). These reviews are conducted on a four-year rotating schedule. \$3,000

Reclamation Request \$864,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

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 that the Act authorizes the Bureau of Reclamation (Reclamation) to implement:

- 1. Rehabilitation and Improvement of the Crow Irrigation Project (CIP). Reclamation is authorized to 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 of the Interior (Secretary) and the Crow Tribe (Tribe). Reclamation serves 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 will review the design of the proposed rehabilitation or improvement and perform value engineering analyses.
- 2. Design and Construction of the Municipal, Rural, & Industrial (MR&I) System. Reclamation is authorized to 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 serves 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", prepared by DOWL HKM Engineering, dated July 2008. This was updated in a status report dated December 2009, on the condition that prior to beginning construction activities, the Secretary will 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, 2018, the discretionary funded activities were approximately 25 percent complete, and the mandatary funded activities were approximately 3 percent complete, as financially determined. All mandatory funds have been received; the respective percentages represent the Tribe's use of the funds.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$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	\$12,772,000	\$12,772,000

Total Cost Information*

	Total Estimated Cost	Total to 9/30/18	FY 2019	FY 2020	Balance to Complete
Reclamation 1/	\$202,694,000	\$65,477,365	\$12,772,000	\$12,772,000	\$111,672,635
Mandatory ^{2/, 3/}	284,964,000	5,117,716	\$0	9,110,000	\$270,736,284
Non-Federal	\$0	\$0	\$0	\$0	\$0
Total	\$487,658,000	\$70,595,081	\$12,772,000	\$21,882,000	\$382,408,919

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

Cost Allocation and Methodology

Allocation	FY 2019	FY 2020
Discretionary Funding ^{1/}	\$198,139,000	\$202,694,000
Mandatory Funding ^{2/}	\$277,935,000	\$284,964,000
Total	\$476,074,000	\$487,658,000

^{1/}Indexing methodology follows standard Reclamation procedures.

METHODOLOGY: The methodology of the cost allocation has not been modified from last year.

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 \$44,313,000 to date. The indexed portion of the mandatory funding is

¹/Discretionary Funding indexed using October 2019 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. The increase in mandatory funding from prior years is due to indexing.

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.

disbursed directly from Treasury. To date, \$1,594,957 of indexed mandatory funds have been transferred by Treasury.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development – 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 Gate Tower, High Check/Drop, 40-Mile Headworks, Reno Diversion Dam, and the highest priority projects identified in the CIP Master Plan updated in FY 2016, and in the MR&I Master Plan updated in FY 2016.

Reclamation Request

\$12,772,000

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 facilities are operated and maintained by water users. This project provides an irrigation water to approximately 98,000 acres. Project recreation features attract around 220,000 visitors per year.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility, Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget	
Water and Energy Management and Development	\$141,000	\$148,000	
Land Management and Development	\$144,000	\$169,000	
Fish and Wildlife Management and Development	\$101,000	\$103,000	
Facility Operations	\$189,000	\$261,000	
Request	\$575,000	\$681,000	
Non-Federal	\$75,000	\$50,000	
Prior Year Funds	\$0	\$0	
Total Program	\$650,000	\$731,000	
Prior Year Funds/Non-Federal/Other Federal	(\$75,000)		
Total Reclamation Allotment	\$575,000	\$681,000	

WORK PROPOSED FOR FY 2020:

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.

\$198,000
Non-Federal - Various

Subtotal, Water and Energy Management and Development

\$148,000

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 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. \$169,000

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 operations.

<u>Biological Opinion (BiOp) Implementation</u> - Continues reconsultation with the National Oceanic and Atmospheric Administration (NOAA) Fisheries and the U.S. Fish and Wildlife Service (USFWS) on Project operations. Continues coordination with the Deschutes Basin Board of Control on habitat conservation planning activities and coordinating and reporting implementation requirements of the 2005 NOAA Fisheries BiOp on operations under Sections 7(a)(2) and 10(j) of the Endangered Species

Act. Continues to work with the USFWS on development of conservation and mitigation actions for the Oregon spotted frog in the upper Deschutes Basin in cooperation with habitat conservation planning activities. \$103,000

Facility Operations - Continues coordination and monitoring of 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's 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 facilities for Haystack, Wickiup, and Crane Prairie Reservoirs. Increase due to daily operations and maintenance costs of hydromet gauging station and Reclamation recreation sites on the Deschutes Project. \$261,000

Reclamation Request \$681,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

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 Counties 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 storage, delivery and 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 the Thief Valley Dam and the key feature of the Upper Division is the 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 the 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 the Owyhee Dam. The Vale Project furnishes irrigation water to 34,993 acres of land. The key features of the Vale Project are the 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget	
Water and Energy Management and Development	\$136,000	\$99,000	
Land Management and Development	\$107,000	\$401,000	
Fish and Wildlife Management and Development	\$228,000	\$272,000	
Facility Operations	\$204,000	\$225,000	
Facility Maintenance and Rehabilitation	\$47,000	\$342,000	
Request	\$722,000	\$1,339,000	
Non-Federal	\$39,000	\$25,000	
Prior Year Funds	\$0	\$0	
Total Program	\$761,000	\$1,364,000	
Prior Year Funds/Non-Federal/Other Federal	(\$39,000)	(\$25,000)	
Total Reclamation Allotment	\$722,000	\$1,339,000	

WORK PROPOSED FOR FY 2020:

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 to provide resources to monitor unauthorized use of water.

\$114,000

Non-Federal - Various

\$15,000

Subtotal, Water and Energy Management and Development

\$99,000

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 interests, 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. Continues recreation planning, writing and overseeing of managing partner agreements, activity planning and coordinating site development, inspecting accessibility and public health and safety compliance, administering financial assistance agreements, reviewing development and retrofit designs, and responding to Reclamation, public and interagency inquiries. Increase is due to labor requirements for land management oversight and \$401,000 Geographic Information System mapping.

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 operational data relevant to fish and wildlife issues. Continues planning, designing, and implementing activities for the protection of fish and wildlife and their habitats. Biological Opinion (BiOp) Implementation - The Upper Snake River BiOp, issued in 2005 (for bull trout) and supplemented in 2014 (for bull trout critical habitat), focuses on impacts of operations regarding bull trout and bull trout critical habitat in the Eastern Oregon Project area. Continues planning for the Phillips Reservoir Deer Creek Fish Passage. 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 into Beulah Reservoir. \$272,000

Facility Operations - Continues operations and maintenance (O&M) 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. Continues revision of dam Standard Operating Procedures, Emergency Preparedness Plans (EAP) and periodic EAP exercises. Continues oversight and technical assistance to operators of the Vale, Baker and Burnt River Projects during spring flood control operations. \$235,000

Non-Federal - Various (\$10,000)

Subtotal, Facility Operations

\$225,000

Facility Maintenance and Rehabilitation - Begins engineering and construction of 175 yards of shoreline stabilization at Unity Lake to address a public safety hazard. Continues dam and distribution system facility inspections. Continues technical assistance to the operating entities for completion of O&M recommendations resulting from facility inspections 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. Increase due to extraordinary maintenance associated with Unity Lake shoreline stabilization.

Reclamation Request \$1,339,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

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, basinwide program for endangered species in the Central Platte River in Nebraska. The Program addresses habitat recovery for four species: The Whooping Crane, Piping Plover, Interior Least Tern, and Pallid Sturgeon. Under the Program, Reclamation receives compliance under the Endangered Species Act (ESA) for continued operations of the Colorado-Big Thompson and North Platte projects that 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 cash-equivalent 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 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.

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, 2018, the Project was approximately 90 percent complete, as financially determined. The Federal government has committed 90 percent of its cost share towards completing the Project and the States have committed 89 percent at October 1, 2019, price levels.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #3: Foster partnerships to achieve balanced stewardship and use of our public lands **Measure**: Number of non-DOI acres restored, including through partnerships, as specified in plans or agreements that involve DOI

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget	
Fish and Wildlife Management and Development	\$12,350,000	\$4,000,000	
Enacted/Request	\$12,350,000	\$4,000,000	
Non-Federal	\$11,959,000	\$3,816,000	
Prior Year Funds	\$0	\$0	
Total Program	\$24,309,000	\$7,816,000	
Prior Year Funds/Non-Federal	(\$11,959,000)	(\$3,816,000)	
Total Reclamation Allotment	\$12,350,000	\$4,000,000	

Total Recovery Implementation Program Cost Information*

	Total Estimated Cost	Total to 9/30/18 ^{2/}	FY 2019	FY 2020	Balance to Complete ^{3/4/}
Reclamation ^{1/}	\$185,714,500	\$168,237,173	\$11,959,000	\$3,665,000	\$0
Non-Federal	\$189,344,580	\$168,237,173	\$11,959,000	\$3,665,000	\$0
Total	\$375,059,080	\$336,474,346	\$23,918,000	\$7,330,000	\$0

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

Recovery Implementation Cost Allocation and Methodology

Allocation	FY 2020	
Fish and Wildlife	\$375,059,080	
Total	\$375,059,080	

METHODOLOGY: All costs are assigned as non-reimbursable and are based on final indexed values as of October 1, 2019.

APPROPRIATION CEILING: Appropriations authorized are \$157,140,000 (October 2005 price levels) per Attachment I to the Program Document (Finance Document). At October 2019 price levels, the indexed portion of the Federal ceiling is \$185,714,500; the indexed portion of the non-Federal ceiling is \$189,344,580; with a total indexed ceiling of \$375,059,080. This authorization is adequate to cover the project as currently authorized.

¹/Does not include oversight activities that do not apply towards the ceiling.

²/ Total Estimated Costs includes indexing through October 2019.

^{3/} The total Federal costs to date do not include revenues generated by agricultural leases, gravel mining, and other activities which are incidental to habitat creation and maintenance on Program lands. These revenues are considered part of the Federal contribution and reduce the Federal balance to complete amount. As of September 30, 2018, the total Federal share of the Program revenues is \$3,196,742.96.

^{4/} First increment sunset date is September 30, 2020; Program and States are in the process of requesting legislative extension.

WORK PROPOSED FOR FY 2020:

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 2020 include the following:

- Funds will provide for Reclamation's participation in the Program that 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.
 - Continued exploration and acquisition of additional water through groundwater recharge, groundwater management, water leasing, water management incentives, broad scale recharge, and slurry wall gravel pits.
- 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 but are not limited to:
 - o Road, fence, and building maintenance.
 - O Noxious weed control and mowing.
 - 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, but are not limited to:
 - The annual monitoring of whooping cranes during the spring and fall migration seasons in order to track the number of cranes that utilize the Central Platte River and the type of habitats they utilize.
 - Annual interior least tern and piping plover monitoring, which is conducted May through August.
 - o Annual geomorphology/in-channel vegetation monitoring, which collects data related to river channel transects including channel profile and vegetation surveys.
 - 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.

Endangered Species Recovery Implementation Program (Platte River Recovery Implementation Program)

- 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.
- The operation and maintenance of stream gages, 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.
- 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.

Reduction in funding simply represents successful completion of milestones. All milestones have been met except the Water Action Plan milestone. Program will continue implementation activities to meet the Water Action Plan milestone, and monitoring, data collection, and scientific activities.

\$7,816,000 Non-Federal (States of Wyoming, Colorado, and Nebraska) (\$3,816,000)

Subtotal, Fish and Wildlife Management and Development

\$4,000,000

Reclamation Request

\$4,000,000

Endangered Species Recovery Implementation Program (Upper Colorado & San Juan River Basins)

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 in 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.

Continued funding is necessary 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 2,444 water projects diverting more than 3.7 million acre-feet per year based on the total number of consultations through 2016.

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, 2017, 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 60 percent of its cost-share towards completing the project, the non-Federal sponsors have committed 98 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and

activities

Measure: Number of Threatened or Endangered species recovery activities implemented

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019	FY 2020
Activity	Enacted	President's Budget
Fish and Wildlife Management and Development	\$4,302,000	\$2,850,000
Request	\$4,302,000	\$2,850,000
Non-Federal	\$0	\$0
Prior Year Funds	\$432,822	\$0
Total Program	\$4,734,822	\$2,850,000
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	(\$432,822)	\$0
Total Reclamation Allotment	\$4,302,000	\$2,850,000

Total Cost Information*

	Total Estimated Cost ^{1/}	Total to 9/30/18 ^{1/}	FY 2019 ^{1/} Enacted	FY 2020 President's Budget	Balance to Complete ^{1/}
Reclamation	\$119,446,000	\$81,551,427	\$4,302,000	\$2,850,000	\$30,742,573
Non-Federal (States)	\$104,000,000	\$102,554,953	\$0	\$0	\$1,445,047
CRSP Revenues	\$17,000,000	\$16,993,620	\$0	\$0	\$6,380
Total	\$240,446,000	\$201,100,000	\$4,302,000	\$2,850,000	\$32,194,000

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

Construction Cost Allocation and Methodology

Allocation	FY 2019	FY 2020
Fish and Wildlife Management and Development	\$240,446,000	\$240,446,000

METHODOLOGY: The methodology of cost allocation has not been modified.

APPROPRIATION CEILING: The original authorization was P.L. 106-392, and was subsequently amended by P.L. 107-375, P.L. 107-375, P.L. 109-183, P.L. 111-11 and P.L. 112-270. The amendments

¹/Does not include Reclamation management and project activities outside the scope of the legal requirements to avoid jeopardy. Balance to complete has been adjusted to reflect increased ceiling authorized by P.L. 111-11.

increased the authorized cost ceiling for appropriated funds (Capital Projects) and extended the authority for utilizing CRSP hydropower revenues to support Base Funded activities. The current authorization to expend CRSP hydropower revenues expires at the end of FY 2019 and the authority to expend appropriated funds will expire at the end of FY 2023.

WORK PROPOSED FOR FY 2020:

Fish and Wildlife Management and Development -

Continues to provide funding for the following recovery program tasks and activities:

<u>Upper Colorado Floodplain Habitat Development</u> - Construct gated water control/fish screening facility(ies) to reconnect floodplain backwater(s) to river ecosystem. The purpose of these facilities is to entrain larval endangered fish during spring runoff and provide nursery habitat to promote growth and enhance the probability of survival before returning juvenile fish to the river ecosystem.

\$1,000,000

<u>Grand Valley Irrigation Company Fish Screen</u> - Rehabilitate existing fish screen with additional modified features to more effectively remove debris from screen panels and minimize fish entrainment. \$500,000

San Juan Floodplain Habitat Development - Construct gated water control/fish screening facility(ies) to reconnect floodplain backwater(s) to river ecosystem. The purpose of these facilities is to entrain larval endangered fish during spring runoff and provide nursery habitat to promote growth and enhance the probability of survival before returning juvenile fish to the river ecosystem. \$1,000,000

<u>Arizona Public Service (APS) Fish Passage</u> - Plan and design fish passage structure for the APS Division Dam. \$200,000

<u>San Juan River Basin Program Management</u> - Program management tasks include preparing program budgets, expenditure tracking, contract administration, participation in recovery program activities to determine the best path to individual species recovery and efforts to address concerns and issues associated with implementation of capital projects.

\$50,000

<u>Upper Colorado Program Management</u> - Program management tasks include preparing program budgets, expenditure tracking, contract administration, participation in recovery program activities to determine the best path to individual species recovery and efforts to address concerns and issues associated with implementation of capital projects.

\$100,000

Orchard Mesa Irrigation District Canal Automation Project – Funding is not requested as construction of Orchard Mesa Irrigation District Canal Automation Project is complete.

Subtotal, Fish and Wildlife Management and Development

\$2,850,000

Reclamation Request

\$2,850,000

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 27,434. 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 Opheim, 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 treated 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; P.L. 115-244, Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, 2019, September 21, 2018.

COMPLETION DATA: As of September 30, 2018, Fort Peck Reservation/Dry Prairie Rural Water System was approximately 70 percent complete, as financially determined. The Federal Government has committed 66 percent of its maximum cost-share towards completing the project; the non-Federal sponsor has committed 87 percent of its minimum cost-share.

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 move forward with important investments in water resources infrastructure and the Department of the Interior stands ready to support that effort.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$30,200,000	\$2,431,000
Enacted/Request	\$30,200,000	\$2,431,000
Non-Federal/Prior Year Funds	\$0	\$0
Total Program	\$30,200,000	\$2,431,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$30,200,000	\$2,431,000

Total Cost Information

	Total Estimated Cost	Total to 9/30/18	FY 2019	FY 2020	Balance to Complete
Reclamation	\$311,483,000	\$197,180,026	\$30,200,000	\$2,431,000	\$81,671,974
Non-Federal	\$28,559,000	\$24,402,599	\$0	\$0	\$4,156,401
Total	\$340,042,000	\$221,582,625	\$30,200,000	\$2,431,000	\$85,828,375

Cost Allocation and Methodology

Allocation	FY 2019	FY 2020
Municipal and Industrial	\$336,003,000	\$340,042,000
Total	\$336,003,000	\$340,042,000

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 2019 price levels, the indexed portion of the Federal ceiling is \$311,483,000; the indexed portion of the non-Federal ceiling is \$28,559,000; with a total indexed ceiling of \$340,042,000. This authorization is adequate to cover the project as currently proposed.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Funds will be used for program administration and contract oversight by Reclamation and the Tribe.

Reclamation Request \$2,431,000

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 about 7,000 acre-feet per year of 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$29,000	\$25,000
Land Management and Development	\$21,000	\$50,000
Facility Operations	\$64,000	\$50,000
Facility Maintenance and Rehabilitation	\$75,000	\$70,000
Request	\$189,000	\$195,000
Non-Federal	\$0	\$0
Prior Year Funds	\$42,739	\$0
Total Program	\$231,739	\$195,000
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	(\$42,739)	\$0
Total Reclamation Allotment	\$189,000	\$195,000

WORK PROPOSED FOR FY 2020:

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. \$25,000

Land Management and Development - Continues land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. Increase is due to realignment of project priorities and project coordination programs. \$50,000

Facility Operations - Continues dam tender training, updating of Standing Operating Procedures, and assisting local entities in preparing and implementing Emergency Action Plans. Continues water supply forecasting, monitoring, and hydrologic database activities. \$50,000

Facility Maintenance and Rehabilitation - Continues scheduled bridge inspections of three Type 1 bridges. Continues inventories, examination of project structures for safety, and reviews of operation and maintenance for facilities operated by water users. Continues preparation of examination reports, instrumentation monitoring, and updating of project records and drawings. Continues geologic and slide monitoring, and annual reporting requirements under the Dam Safety Program. **\$70,000**

Reclamation Request \$195,000

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 supplemental 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 the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Percent of baseline acres infested with invasive plant species that are under control

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$44,000	\$27,000
Land Management and Development	\$75,000	\$75,000
Fish and Wildlife Management and Development	\$33,000	\$33,000
Facility Operations	\$8,633,000	\$9,253,000
Facility Maintenance and Rehabilitation	\$5,291,000	\$631,000
Enacted/Request	\$14,076,000	\$10,019,000
Non-Federal	\$8,293,000	\$75,000
Prior Year Funds	\$0	\$0
Total Program	\$22,369,000	\$10,094,000
Prior Year Funds/Non-Federal	(\$8,293,000)	(\$75,000)
Total Reclamation Allotment	\$14,076,000	\$10,019,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development – Continues to provide assistance in the evaluation of proposed water conservation measures and demonstration projects identified in conservation plans which promote effective water management and conservation. \$27,000

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. \$150,000

Non-Federal Participation - Colorado Division of Parks and Outdoor Recreation

(\$75,000)

Subtotal, Land Management and Development

\$75,000

Fish and Wildlife Management and Development – Includes coordination of activities associated with conservation, enhancement, development and restoration of fish and wildlife populations and their habitats. \$33,000

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, aquatic nuisance species sampling, and cultural resources activities related to project operations.

\$9,253,000

Facility Maintenance and Rehabilitation – Continues Boustead Tunnel weep hole drilling, and repairs to the Cunningham Tunnel lining. Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures; and, continues support for the inspection of bridges 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. The funding request also varies depending on the type of required annual inspections at the dam. "Additional Funding for Ongoing Work" provided by Congress in FY 2019 was allocated in part for replacement of the West Slope Collection System slide and radial gate actuators. Less funding is requested due to award of the construction contract for the contraction joint leak repair scheduled in FY 2019.

Reclamation Request \$10,019,000

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, Colorado.

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 prevent 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 \$382 million in quantified economic salinity damages to municipal and agricultural water users along the Colorado River. This is a 62 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 operating 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; 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. 110-246, Food, Conservation, and Energy Act of 2008, June 18, 2008.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

1 1 0 G 1 um 1 munciui Dutu		
Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$360,000	\$135,000
Land Management and Development	\$146,000	\$140,000
Facility Operations	\$2,254,000	\$1,650,000
Facility Maintenance and Rehabilitation	\$72,000	\$93,000
Request	\$2,832,000	\$2,018,000
Non-Federal	\$840,000	\$782,834
Prior Year Funds	\$684,204	\$0
Total Program	\$4,356,204	\$2,800,834
Prior Year Funds/Non-Federal	(\$1,524,204)	(\$782,834)
Total Reclamation Allotment	\$2,832,000	\$2,018,000

WORK PROPOSED FOR FY 2020:

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 and administering and developing 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 services and design development engineering support to develop collaborative solutions to aging infrastructure and water delivery service area urbanization impacts. Decrease is due to reduced technical support to modernize aging infrastructure and participation in System Conservation Program.

\$290,167

Non-Federal (Upper and Lower Colorado River Basin Development Funds) (\$155,167)

Subtotal, Water and Energy Management and Development

\$135,000

Land Management and Development - Continues land management activities which consist of complying with and administering laws and regulations, execution of agreements, contracts, and grants or other agreements for the use and management of lands and the protection of recreation facilities and land resources. \$186,667

Non-Federal (Upper and Lower Colorado River Basin Development Funds) (\$46,667)

Subtotal, Land Management and Development

\$140,000

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 the salinity unit. \$2,200,000

Non-Federal (Upper and Lower Colorado River Basin Development Funds) (\$550,000)

Subtotal, Facility Operations

\$1,650,000

Facility Maintenance and Rehabilitation - Continues inspections and maintenance of Type 1 (Reclamation owned highway bridge located on a public road) and Type 2 (Reclamation owned bridge not located on a public road) bridges, examination of existing structures through identification of O&M deficiencies and dam safety concerns, and facilities review of O&M. \$124,000 Non-Federal (Upper and Lower Colorado River Basin Development Funds) (\$31,000)

Subtotal, Facility Maintenance and Rehabilitation

\$93,000

Reclamation Request \$2,018,000

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. The project also delivers approximately 232,000 acre-feet of irrigation water on an average annual basis.

Bonneville Power Administration (BPA), through a separate Memorandum of Agreement, directly funds power operation and maintenance (O&M) costs. In addition, BPA directly funds major power replacements, additions, and improvements through subagreements.

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 2018-2022:

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$380,000	\$380,000
Facility Maintenance and Rehabilitation	\$54,000	\$96,000
Request	\$434,000	\$476,000
Non-Federal	\$0	\$0
Other Federal – BPA Direct Funding	\$8,495,000	\$7,252,000
Other Federal – BPA Subagreement	\$16,745,000	\$7,230,000
Other Federal – BPA Small Capital	\$385,000	\$450,000
Other Federal – BPA Multipurpose funding	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$26,059,000	\$15,408,000
Prior Year Funds/Non Federal	(\$25,625,000)	(\$14,932,000)
Total Reclamation Allotment	\$434,000	\$476,000

WORK PROPOSED FOR FY 2020:

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

Power Items – Begins recoating and repair of the penstocks to reduce damage and preclude possible operational failure. Begins required periodic facility review of the facility power program to provide recommendations for corrective action. Continues visitor center building rehabilitation and heating, ventilation and air conditioning replacement. The existing visitor center was constructed in 1964 and would benefit from updating and remodeling to accommodate the installation of new exhibits and a virtual tour. Continues power plant domestic water supply addition. The Hungry Horse facility does not have a domestic water supply that meets the Safe Drinking Water Act. Work may include replacement of piping, valves, water treatment system and well drilling. An approved domestic water supply system is needed to ensure regulatory compliance. Continues maintenance of four fixed wheel gates associated with the main unit penstocks. Painting and seal replacement is needed periodically to ensure continued operation of the gates. Continues study of turbine and winding replacement of units G1 - G4. The study will examine if existing turbines could be re-designed to provide better efficiency. Continues turbine cavitation repairs. Hungry Horse turbine runners have considerable cavitation damage. Continues replacement of the drainage and unwatering sump level monitoring originally installed in 1950. Replacement is required as this equipment is original, and failure of the system will result in inability to pump the water from the sump, resulting in flooding of the lower floors of the power plant. Continues Columbia River System Operation Review with corresponding environmental impact statement (EIS). The EIS will evaluate alternatives for long-term system operations and impacts on the Federal Columbia

River Power System. Maintenance items include replacement of small tools and equipment directly related to the power generation facility. \$8,082,000

Other Federal - BPA Direct Funding (\$7,252,000)

Other Federal - BPA Small Capital

(\$450,000)

Subtotal, Facility Operations

\$380,000

Facility Maintenance and Rehabilitation - Begins installation of a radio system for the Hungry Horse facility. There is a lack of reliable communications between plant personnel due to the remote location of the facility. The new radio system will allow for communication with the facility, Grand Coulee Dam and with local first responders. Continues visitor center rock scaling and netting. This is needed for rock overhangs along the hillside above the roadway and parking areas near the visitor center to reduce the risk of large boulders and rocks falling onto the visiting public and government employees who work in the area. Continues cultural resources properties mitigation activities in compliance with Federal law governing the treatment of impacted historic properties.

<u>Power Items</u> - Continues power plant crane control upgrade and rehabilitation to aging equipment to reduce work delays and costly slippage of unit outage schedules. Completes transformer disconnect switches 581 and 781 replacement. The switches are original to the facility and began operating in 1952 when the plant was placed into service. The existing switches are beyond their intended service life of 50 years and need to be replaced to avoid outages to maintain reliability. \$7,326,000
Other Federal - BPA Subagreement (\$7,230,000)

Subtotal, Facility Maintenance and Rehabilitation

\$96,000

Reclamation Request

\$476,000

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 approximately 29,240 acres of land on the south side of the river between Huntley and Pompeys Pillar, Montana. Project is a multipurpose project providing irrigation, municipal and industrial water, recreation, and fish and wildlife benefits.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$7,000	\$24,000
Fish and Wildlife Management and Development	\$0	\$14,000
Facility Operations	\$46,000	\$43,000
Facility Maintenance and Rehabilitation	\$0	\$14,000
Enacted/Request	\$53,000	\$95,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$53,000	\$95,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$53,000	\$95,000

WORK PROPOSED FOR FY 2020:

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. Increase due to activities associated with water conservation plan updates and implementation strategies. \$24,000

Fish and Wildlife Management and Development – Oversight of monitoring fish and wildlife habitat and resources with emphasis on native, threatened and endangered species recovery and restoration.

\$14,000

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. \$43,000

Facility Maintenance and Rehabilitation – Facility examinations and associated facility reviews to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam. Increase is due to additional O&M review requirements in FY 2020. \$14,000

Reclamation Request \$95,000

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 agricultural 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$31,000	\$31,000
Land Management and Development	\$59,000	\$64,000
Facility Operations	\$122,000	\$150,000
Facility Maintenance and Rehabilitation	\$75,000	\$78,000
Enacted/Request	\$287,000	\$323,000
Non-Federal	\$0	\$0
Prior Year Funds	\$17,710	\$0
Total Program	\$304,710	\$323,000
Prior Year Funds/Non-Federal	(\$17,710)	\$0
Total Reclamation Allotment	\$287,000	\$323,000

WORK PROPOSED FOR FY 2020:

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 oversight and administration of contract repayment. \$31,000

Land Management and Development - Continues land resources management, to include asset inventory system database management, Geographic Information System activities, 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. \$64,000

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. \$150,000

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. **\$78,000**

Reclamation Request \$323,000

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 (combined, these two hydropower plants produce and average of 242,000 megawatt-hours of electricity each year); 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 delivers approximately 57,000 acre-feet of water, administers 59,000 acres of the Project and manages recreation on 6,000 acres with an average of 169,000 annual visitors.

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)

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$10,000	\$10,000
Land Management and Development	\$58,000	\$58,000
Facility Operations	\$3,765,000	\$4,050,000
Facility Maintenance and Rehabilitation	\$282,000	\$1,427,000
Enacted/Request	\$4,115,000	\$5,545,000
Non-Federal	\$78,000	\$83,000
Prior Year Funds	\$0	\$0
Total Program	\$4,193,000	\$5,628,000
Prior Year Funds/Non-Federal	(\$78,000)	(\$83,000)
Total Reclamation Allotment	\$4,115,000	\$5,545,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues to provide assistance in the evaluation of proposed water conservation measures and demonstration projects identified in conservation plans which promote effective water management and conservation. Continues negotiation and administration of water marketing activities, including administration of contracts with one irrigation district and two entities. \$10,000

Land Management and Development - Continues development at recreation sites to ensure facilities comply with health, safety, and accessibility standards at Alcova and Seminoe Reservoirs.

\$116,000 Non-Federal - State of Wyoming and Natrona County

(\$58,000)

Subtotal, Land Management and Development

\$58,000

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. \$4,070,000 Non-Federal - Casper-Alcova Irrigation District (\$20,000)

Subtotal, Facility Operations

\$4,050,000

Facility Maintenance and Rehabilitation – Continues Alcova Dam spillway concrete repair and 100 percent power customer funded projects listed below. 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 dependent upon the need for replacements, additions, and extraordinary maintenance (XM) requirements. The funding varies depending on the type of required annual inspections at the dam. Increase due to planned contract award for the Alcova spillway concrete repair.

\$1,432,000

Non-Federal Power Activities – Seminoe powerplant rehabilitation.

(\$5,000)

Subtotal, Facility Maintenance and Rehabilitation

\$1,427,000

Reclamation Request

\$5,545,000

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. Reclamation operates the Project and 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 would 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. Related to ESA compliance, the Klamath Area Office has re-initiated consultations with the Fish and Wildlife Service and the National Marine Fisheries Service regarding Project operations effects to federally-listed threatened and endangered species Per Presidential Memorandum entitled "Promoting the Reliable Supply and Delivery of Water in the West," dated October 19, 2018, this consultation is mandated to be completed by August 2019.

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; P.L. 74-46, Soil Conservation Act of 1935; P.L. 88-567, Kuchel Act, September 2, 1964; P.L. 115-270, America's Water Infrastructure Act of 2018, October 23, 2018.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$5,915,000	\$4,178,000
Land Management and Development	\$1,202,000	\$1,100,000
Fish and Wildlife Management and Development	\$11,638,000	\$7,801,000
Facility Operations	\$2,559,000	\$2,178,000
Facility Maintenance and Rehabilitation	\$1,186,000	\$862,000
Enacted/Request	\$22,500,000	\$16,119,000
Non-Federal ¹	\$1,500,000	\$1,500,000
Prior Year Funds	\$837,118	\$0
Total Program	\$24,837,118	\$17,619,000
Prior Year Funds/Non-Federal	(\$2,337,118)	(\$1,500,000)
Total Reclamation Allotment	\$22,500,000	\$16,119,000

^{1/}Irrigation District funding

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development -

Klamath Project Operations Management - Continues the development of the annual operations plan for Project operation and continues other related planning and environmental compliance activities. Activities also include water measurement, forecasting, modeling, and delivery planning. These activities provide guiding principles and direction for water uses for ESA, Indian Trust, and irrigation contracts. Funding provides for the compliance with the 2013 Biological Opinion (BiOp) and subsequent significant minor and major re-initiations. The 2019 re-initiation will include modifications for the State adjudication of water rights, new listed species, essential fish habitat, and operational changes made due to water recirculation and water conservation.

\$2,743,000

<u>Water Rights and Contract Administration</u> - Continues Reclamation's activities related to the management of water rights and contracts. Activities include resolving contractual inconsistencies and issues related to changing laws, regulations, and hydrologic cycles; contract renewals or new executions; resolution of ongoing water rights issues and conflicts as a result of the Klamath River General Stream Adjudication; and general management enforcement of Reclamation's water contracts. \$400,000

<u>Water Quality Monitoring</u> - Reclamation continues to conduct water quality monitoring and related activities to address water quality impairments and Total Daily Maximum Daily Loads (TMDL) requirements relevant to Reclamation Klamath Project operations in the Upper Klamath Basin in Oregon and California. Water quality related activities have included long term continuous monitoring of physical parameter conditions such as pH, dissolved oxygen, specific conductivity, nutrients, dissolved metals, and temperature. Data generated from this work will be used to make decisions regarding the effects of Project operations and activities on endangered fish, wildlife refuges, and other resources.

\$400,000

<u>Water Measure Operation & Support</u> - Continues development of both an annual plan for Project operations, and continued planning and compliance activities related to development of a long-term plan for operations. The long-range plan will identify areas within the Klamath Project where water measurement is critical for the ongoing operation of the Project. This work also covers physical water measurement activities within Klamath Project waterways as well as O&M activities on measurement sites and equipment \$635,000

Subtotal, Water and Energy Management and Development

\$4,178,000

Land Management and Development -

<u>Lease Land Management</u> - Continues administration of Reclamation's mandate under Public Law 88-567 (Kuchel Act) to continue management of approximately 20,000 acres of land on Lower Klamath and Tule Lake National Wildlife Refuges. The land is leased for full agricultural production with benefits for wildlife and local employment. These lands generate several million dollars of annual revenue that is credited to the Reclamation fund and shared with local counties. \$500,000

<u>Land Resource Management</u> - Activities include general land management activities and include land disposal and acquisitions, resolution of land management and ownership conflicts, trespass issues, encroachments, issuance and management of Right-of-Use applications, proposed and implemented crossings by special use projects, increased recreational management demands, and continues review of lands owned by the United States for compliance with hazardous material laws and regulations.

\$600,000

Subtotal, Land Management and Development

\$1,100,000

Fish and Wildlife Management and Development -

<u>Tribal Funding Agreements & Tribal Trust Responsibilities</u> - Continues to engage in government-to-government and tribal trust responsibilities with Klamath River Basin Tribes. These activities also contribute to key elements of Klamath Basin fish and natural resource research, monitoring, and management programs that are considered valuable tribal assets to the Klamath Basin Tribes.

\$1,658,000

Klamath Basin Fish Studies - 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. \$50,000

ESA Compliance - Reclamation continues to implement ESA compliance activities required by or to support the BiOp which analyzes the effects of the ongoing operations of Reclamation's Klamath Project on federally listed threatened and endangered species, including the endangered Lost River and shortnose suckers and the threatened coho salmon and their designated critical habitat. Activities include research, monitoring, restoration, and consultation required under the ESA and in the terms and conditions of the active BiOp on the Klamath Project operations. \$5,593,000

<u>ESA - Water Quality Monitoring</u> - 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 BiOp's on Project operations by providing data on water quality as it relates to the survival and persistence of multiple ESA listed species affected by Klamath Project operations.

\$500,000

Subtotal, Fish and Wildlife Management and Development

\$7,801,000

Facility Operations -

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.

Non-Federal (Irrigation Districts)

\$\frac{\\$2,500,000}{\\$1,500,000}\$
\$\\$1,000,000

<u>Lease Land Operations</u> - Continues operation and maintenance (O&M) of Reclamation's mandate under Public Law 88-567 (Kuchel Act) on facilities supporting approximately 20,000 acres of land on Lower Klamath and Tule Lake National Wildlife Refuges. Facilities requiring O&M include: pumps, canals, drains, water structures, dikes, roads, wash stations, etc. Vegetation control, water delivery and drainage assessments are also included.

\$521,000

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.

\$37,000

<u>Safety, Security and Hazardous Materials</u> - Continues O&M of an updated security system for Reclamation-owned project office facilities and A-Canal Headworks. \$150,000

<u>Miscellaneous O&M</u> - Continues O&M of Project radio, Supervisory Control and Data Acquisition (SCADA), and other 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 (KBAO), Denver, Region and other sites. \$210,000

<u>Klamath Basin Area Office Facility Operations & Maintenance (O&M)</u> - Continues Office O&M reviews of facilities. Reclamation maintains its facilities to assure continued ability to manage its administrative, fish evaluation, water quality, and other such functions.

\$\frac{\$260,000}{\$}\$

Subtotal, Facility \$2,178,000

Facility Maintenance and Rehabilitation -

Review O&M (RO&M) Program Examinations - Continues annual reviews of Reclamation facilities (Reserved Works and Transferred Works such as bridges, roads, dams, canals, pumps, etc.) and the preparation of reports for those reviews. Activities include those that ensure dams can be operated and maintained in a safe manner through inspections and site evaluations for safety deficiencies and analyses utilizing current technologies based on current engineering practices. Identifies corrective actions at Reclamation facilities, including urban encroachment issues, aging infrastructure, and safety concerns.

\$668.000

<u>Bridges and Roads</u> - Continues inspections, monitoring, and reports or appropriate deliverables based on the condition of Reclamation bridges and roads. Includes thorough inspection and development of

recommendations to address Highway Administration standards that are required by directives and standards and for health and safety. \$100,000

<u>Canal Programs</u> - Continues work that was originally conducted under RO&M Program Examinations. As the population of the West has grown, many miles of Reclamation canals have been incorporated into urban areas. While an irrigation canal breach in an originally unpopulated area might have caused little damage, recent canal breaches have flooded new residential developments. Activities under this program include collection of current and comprehensive information about the potential consequences of a canal breach in urbanized areas so that maintenance and repair operations can focus on areas of greatest risk. Activities include inventorying Reclamation canals and identifying canals in urban areas, estimation of economic consequences, including lost benefits, repair/replacement costs, and indirect impacts due to a canal breach scenario.

Subtotal, Facility Maintenance and Rehabilitation

\$862,000

Reclamation Request

\$16,119,000

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, 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.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$3,918,000	\$2,918,000
Land Management and Development	\$2,074,000	\$2,074,000
Fish and Wildlife Management and Development	\$15,000,000	\$0
Facility Operations	\$2,920,000	\$2,920,000
Facility Maintenance and Rehabilitation	\$1,939,000	\$1,481,000
Enacted/Request	\$25,851,000	\$9,393,000
Non-Federal ¹	\$273,182	\$281,377
Prior Year Funds	\$386,327	\$0
Total Program	\$26,510,509	\$9,674,377
Prior Year Funds/Non-Federal	(\$659,509)	(\$281,377)
Total Reclamation Allotment	\$25,851,000	\$9,393,000

^{1/}Truckee Meadows Water Authority funding

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development -

Operating Criteria and Procedures (OCAP) Compliance - Continues OCAP 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. "Additional Funding for Ongoing Work" provided by Congress in FY 2019 was allocated in part to develop survey grade lidar data used for systems optimization and urban canal risk assessments. \$1,000,000

Truckee River Operating Agreement (TROA) - Continues to perform 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. This also provides for Reclamation's 40 percent share of the office of the TROA Administrator. \$1,668,000

<u>Contract Oversight</u> - Continues to provide contract oversight of the Newlands Project Operations and Maintenance (O&M) contract between Reclamation and Truckee-Carson Irrigation District. \$150,000 <u>River Studies</u> – Continues 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

Subtotal, Water and Energy Management and Development

\$2,918,000

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 RMP initiatives for improved management of associated resources for the Newlands Project. Funds will be used to continue to identify and dispose of Reclamation lands that are no longer necessary for Project purposes, identification and management of existing material pits, identify and close abandoned mines, identify and document existing mill sites, administration of applications for drainage and/or discharges into Project facilities. \$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> - Continues the administration of approximately 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. Continues to inventory 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. \$935,000

<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>Title Transfers</u> - Continues compliance work to comply with Section 106 of the National Historic Preservation Act and Hazardous Materials inspections and appraisal reports for the Carson Lake and Pasture, Indian Lakes, and other title transfer activities. \$103,000

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

<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.

\$565,377

Truckee Meadows Water Authority (non-Federal)

(\$281,377) \$284,000 <u>Stampede Power Plant</u> - Continues O&M of the power plant. The power plant 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

Marble Bluff Fish Facility - Continues O&M of the Marble Bluff Fish Facility located adjacent to Marble Bluff Dam. \$227,000

<u>Marble Bluff Dam</u> - 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

<u>Derby Dam Fish Passage</u> - Continues O&M of Derby Dam Fish Passage, which provides spawning passage for threatened Lahontan cutthroat trout residing in Pyramid Lake. \$100,000

Subtotal, Facility Operations

\$2,920,000

Facility Maintenance and Rehabilitation -

Replacements, Additions and Extraordinary Maintenance (RAX) - Continues RAX activities at Stampede, Prosser Creek, and Marble Bluff Dams, Stampede Power Plant, Derby Dam Fish Passage and the Truckee Canal. Activities include Stampede Power Plant excitation and relay replacements, Marble Bluff coatings project, and the Truckee Canal extraordinary maintenance project.

\$1,481,000\$

Reclamation Request \$9,393,000

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 lands the Wash traverses are 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. 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.

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. Due to Reclamation-managed land in the Wash and the impact of drainage from this land on salinity in the Colorado River, Reclamation has a significant interest in the condition of the Wash and continues to assist in funding bankline stabilization activities to control erosion, environmental studies, and continued coordination. 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 quantity and quality of water entering Lake Mead as Reclamation regulates and protects the delivery of water to those entities.

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. The water quality has improved and continues to improve through the implementation of the erosion control structures (weirs) and subsequent revegetation efforts in the Wash channel. These weir and vegetation improvements have increased retention time in the created wetland habitats and the Wash as a whole. The habitat restoration component allows for further natural treatment by the wetlands on this effluent-dominated body of water. The sediment loads have decreased by 90 percent and these reductions have been an improvement from previous years. Reducing the sediment load is important because the Wash discharges into Lake Mead which is the primary drinking water source for southern Nevada.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$700,000	\$595,000
Request	\$700,000	\$595,000
Non-Federal ^{1/}	\$300,000	\$300,000
Prior Year Funds	\$1,482	\$0
Total Program	\$1,001,482	\$895,000
Prior Year Funds/Non-Federal	(\$301,482)	(\$300,000)
Total Reclamation Allotment	\$700,000	\$595,000

^{1/} Includes cost-share from the Southern Nevada Water Authority, Memorandum of Understanding 03MU30003.

Total Cost Information

	Total Estimated Cost	Total to 9/30/18	FY 2019	FY 2020	Balance to Complete
Reclamation ^{1/}	\$30,000,000	\$23,722,549	\$700,000	\$595,000	\$4,982,451
Adjustments ^{2/}	\$42,969,680	\$42,969,680	\$0	\$0	\$0
Total	\$72,969,680	\$66,692,229	\$700,000	\$595,000	\$4,982,451

^{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 2019:

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.

\$895,000 (\$300,000)

Non-Federal – Southern Nevada Water Authority

\$595,000

² Includes cost-share from the Southern Nevada Water Authority, Memorandum of Understanding 03MU30003.

Lake Tahoe Regional Wetlands 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 diversity and abundance of invasive species are threatening the unique natural values of the area that give the Lake Tahoe Basin its national significance. On the northwest shore of the lake, Reclamation operates Lake Tahoe Dam on the Truckee River, which controls the top six feet of Lake Tahoe to provide water for urban and agricultural use downstream. The Upper Truckee River flows into Lake Tahoe at the southern end of the lake and is the largest producer of stream-borne fine 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 as well as Johnson Meadow, which encompasses Middle Reaches 1 and 2. Restoration of these river reaches, as well as other impacted watersheds in the Lake Tahoe Basin, has multiple environmental threshold benefits. This activity is part of the Tahoe Regional Planning Agency's Environmental Improvement Program to prevent further degradation of the water quality of the lake and to provide benefits to soil conservation, vegetation, fisheries and wildlife recreation and scenic resources.

AUTHORIZATION: P.L. 108-7, Consolidated Appropriations Resolution, 2003; and P.L. 85-624, Fish and Wildlife Coordination Act

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Fish and Wildlife Management and Development	\$115,000	\$115,000
Enacted/Request	\$115,000	\$115,000
Prior Year Funds	\$22,946	\$0
Total Program	\$137,946	\$115,000
Prior Year Funds	(\$22,946)	\$0
Total Reclamation Allotment	\$115,000	\$115,000

WORK PROPOSED FOR FY 2020:

Fish and Wildlife Management and Development - Continues administration of existing financial assistance agreements, and also creates new financial assistance agreements, under the Program and for projects funded under the Southern Nevada Public Land Management Act for environmental restoration planning implementation, surveys, monitoring, program coordination and management, and public outreach in the Lake Tahoe Basin, including watershed improvements in the Upper Truckee River (such as the Upper Truckee River restoration and reconfiguration project, Johnson Meadow, Tahoe Pines campground, and the Upper Truckee River Marsh restoration projects) and other Lake Tahoe Basin watersheds. Continues participation in the Lake Tahoe Federal Interagency Partnership. Funding would be used to comply with all Federal environmental laws including but not limited to National Environmental Policy Act, Endangered Species Act, and Section 106 of the National Historic Preservation Act including coordination with grantees on environmental impacts, endangered species, and cultural resources issues and consultations with the appropriate State and Federal agencies for projects funded under this program.

Reclamation Request

\$115,000

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 (LMDT) Treatment Plant. Water flowing from the 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$1,936,000	\$2,198,000
Facility Maintenance and Rehabilitation	\$650,000	\$27,802,000
Enacted/Request	\$2,586,000	\$30,000,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$2,586,000	\$30,000,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$2,586,000	\$30,000,000

WORK PROPOSED FOR FY 2020:

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. \$2,198,000

Facility Maintenance and Rehabilitation - The existing LMDT Treatment Plant is within 5 years of its 30-year expected service life. Developing a proactive plan to replace the aging LMDT Treatment Plant supports Reclamation's long-term responsibilities at Leadville and is more efficient and safe than upgrading LMDT Treatment Plant components in a piecemeal fashion. The FY 2020 request will support final design activities for a new LMDT Treatment Plant and chemical storage facility, construction of hydraulic tunnel plug and support geotechnical and site development activities for new LMDT Treatment Plant construction. Construction of new facilities will ensure environmental compliance, safe and reliable LMDT Treatment Plant operation, and will address personnel and public safety issues and compliance with Federal/State Code requirements. Increase due to scheduled award of the construction contract for the hydraulic tunnel plug.

Reclamation Request \$30,000,000

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 five counties of northwest Iowa.

DESCRIPTION/JUSTIFICATION: The project purpose is to address concerns regarding the low quality, contamination vulnerability, and insufficient 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 costshare, in the form of a grant, is a maximum of 80 percent of the total project construction budget (with the exception of the Federal share for the City of Sioux Falls, which is a maximum of 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, 2018, the project was approximately 80 percent complete, as financially determined. The Federal Government has committed 60 percent of its maximum authorized cost-share towards completing the project; the non-Federal sponsor has committed 100 percent of its minimum authorized cost-share.

Construction activities began in 2004. Funds have been 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. The completed facilities are delivering water to the first 14 of 20 members, serving more than 200,000 individuals in Iowa, Minnesota and South Dakota.

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 move forward with important investments in water resources infrastructure, and the Department of the Interior stands ready to support that effort.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$15,000,000	\$100,000
Enacted/Request	\$15,000,000	\$100,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$15,000,000	\$100,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$15,000,000	\$100,000

Total Cost Information*

	Total Estimated Cost	Total through 9/30/18	FY 2019 ^{1/}	FY 2020	Balance to Complete
Reclamation	\$443,046,000	\$241,537,811	\$15,000,000	\$100,000	\$186,408,189
Non-Federal	\$106,079,000	\$106,079,000	\$0	\$0	\$0
Total	\$549,125,000	\$347,616,811	\$15,000,000	\$100,000	\$186,408,189

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

Cost Allocation and Methodology

Allocation	FY 2019	FY 2020
Municipal and Industrial	\$542,725,000	\$549,125,000
Total	\$542,725,000	\$549,125,000

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 (2000 price level). At October 2019 price levels, the indexed portion of the Federal ceiling is \$443,046,000 and has a total ceiling of \$549,125,000. This authorization is adequate to cover the project as currently proposed.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Funds will be used for administration of the program.

Reclamation Request \$100,000

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 surface water for the Lewiston Orchards Project comes from the Lapwai Creek watershed located primarily within the Nez Perce Reservation.

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 Lewiston Orchards Irrigation District is the operating entity of the Lewiston Orchards Project. The facilities include the Webb Creek Diversion Dam, Sweetwater Diversion Dam, West Fork Sweetwater Diversion Dam, feeder canals, three storage reservoirs (Soldiers Meadows, Reservoir "A" and Lake Waha), 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 percent of system demands and contractual obligations often result in use restrictions for district patrons. Many features and facilities associated with the Lewiston Orchards Project would benefit from substantial repair, maintenance, and in many cases, total replacement. In addition, the facilities and operations routinely conflict with the cultural and natural resource interests of the Nez Perce Tribe. Finally, Lewiston Orchards Project surface diversions reduce water availability and connectivity within the Lapwai Creek watershed, resulting in adverse effects to Endangered Species Act (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; 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.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for Fiscal Year 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$32,000	\$95,000
Land Management and Development	\$27,000	\$34,000
Fish and Wildlife Management and Development	\$1,324,000	\$1,347,000
Facility Operations	\$22,000	\$15,000
Facility Maintenance and Rehabilitation	\$5,000	\$5,000
Request	\$1,410,000	\$1,496,000
Non-Federal	\$25,000	\$60,000
Prior Year Funds	\$0	\$0
Total Program	\$1,435,000	\$1,556,000
Prior Year Funds/Non-Federal/Other Federal	(\$25,000)	(\$60,000)
Total Reclamation Allotment	\$1,410,000	\$1,496,000

WORK PROPOSED FOR FY 2020:

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 through completion of the meter installation project to aid in the protection of threatened and endangered species on the 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 to provide resources to monitor unauthorized use of water. Increase is due to additional Water Conservation Field Service activities which will provide opportunities to work with cost-sharing partners to enhance habitat for the endangered steelhead and improve water supply reliability.

\$130,000 Non-Federal - Various (\$35,000)

Subtotal, Water and Energy Management and Development

\$95,000

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), administering permits (consent-to-use, rights-of-way) and leases (grazing, mineral, and gravel pits), constructing and maintaining fencing, conducting land and cadastral surveys, administering use agreements and resolving unauthorized use. Continues inspecting for recreation site accessibility and public health and safety compliance, and responding to Reclamation, public and interagency inquiries. \$34,000

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

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 ESA-listed steelhead which includes monitoring and reporting on incidental take as well as temperature monitoring, stream flow gauging, monitoring steelhead movement, management and coordination, and fisheries monitoring that contribute to a better understanding of the Project impacts on fish and wildlife. Continues implementation of the water exchange and title transfer project which involves construction of an off-reservation groundwater pumping system consisting of multiple wells. Each well would be constructed in phases and would be connected to the Lewiston Orchards Project system in lieu of surface water to provide instream flow to meet requirements of the ESA. Testing and operation of the pilot well indicates that it will meet its production target and that the regional aquifer will support additional wells as part of the full water exchange. Continues the long-term plan of constructing multiple wells and power supply infrastructure through 2025. Reclamation, Lewiston Orchards Irrigation District, the Nez Perce Tribe and Bureau of Indian Affairs are collaboratively pursuing the water exchange and title transfer project under a 2014 Term Sheet Agreement and other written agreements.

\$1,347,000

Facility Operations - Continues funding for the review, investigation and reporting of public safety and security issues, Hydromet system operation and maintenance (O&M) costs, and safety and boundary fence maintenance at recreation sites. Continues revision of dam Standard Operating Procedures, Emergency Preparedness Plans (EPP) and periodic EPP exercises. Continues implementing Regional policy on ESA costs which results in all the ongoing costs of coordination and reporting, implementation, and monitoring being allocated to irrigation and power customers.

\$40,000

Non-Federal - Various

(\$25,000)

Subtotal, Facility Operations

\$15,000

Facility Maintenance and Rehabilitation - Continues dam and distribution system facility inspections. Continues technical assistance to the operating entities for completion of O&M recommendations resulting from facility inspections 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 \$1,496,000

Lower Colorado River Operations Program

LOCATION: All areas within the Lower Colorado Region boundaries.

DESCRIPTION/JUSTIFICATION: The Secretary of the Interior (Secretary), 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. 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.

Given that the Colorado River Basin is experiencing the driest 20-year period in over 100 years of historical records, the water master role funded under LCROP includes dealing with this historic drought. Reclamation, the Lower Basin States, and other key stakeholders are developing a Drought Contingency Plan (DCP) to conserve water in Lake Mead to address and reduce the likelihood of Lake Mead declining to critical elevations. As part of the DCP, stakeholders would commit to take affirmative actions to implement programs designed to create or conserve a specific volume of Colorado River system water to contribute to conservation of water supplies in Lake Mead. Other drought response activities include continuing voluntary water conservation agreements under the Pilot System Conservation Program (PSCP), the anticipated Arizona Implementation Agreement (or referred to as DCP+), and other similar water conservation programs all in cooperation with non-federal funding partners. Continued implementation of Minute 323, the successor minute to Minute 319, will help mitigate the impacts of the drought by Mexico incurring water reductions during a shortage condition in the Lower Basin and additional reductions consistent with Mexico's water scarcity contingency plan.

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 27 State and Federal special status species (eight federally listed species). Implementation of this program will include the rearing and stocking of an estimated 1.2 million native fish, creating and managing over 8,100 acres of habitat (cottonwood-willow, mesquite, marsh, and backwaters), and 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 River 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 and P.L. 113-235, Appropriations Act of 2015, Title II, sec. 205-206.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving our Land and Water

Goal #1: Utilize science in land, water, species and habitat management for adaptation to environmental changes

Measure: Number of Threatened or Endangered species recovery activities implemented.

Mission Area 1: Conserving our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability

Rating (FRR) [high-and significant hazard dams]

Mission Area 1: Conserving our Land and Water

Goal #3: Foster partnerships to achieve balanced stewardship and use of our public lands

Measure: Number of non-DOI acres restored, including through partnerships, as specified in plans or agreements that involve DOI

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$26,325,000	\$14,448,000
Fish and Wildlife Management and Development	\$16,851,000	\$16,851,000
Request	\$43,176,000	\$31,299,000
Non-Federal	\$16,851,000	\$16,851,000
Prior Year Funds	\$1,346,654	\$0
Total Program	\$61,373,654	\$48,150,000
Prior Year Funds/Non-Federal	(\$18,197,654)	(\$16,851,000)
Total Reclamation Allotment	\$43,176,000	\$31,299,000

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 (indexed for inflation) for the first 15 years of the program.

WORK PROPOSED FOR FY 2020:

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 guidelines 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 a water shortage in the lower basin with its attendant impacts to municipal, industrial, and Indian and Non-Indian agricultural water users in the Region. \$5,500,000

<u>Drought Response Actions</u> - Funding provides for various activities, actions, or programs to help mitigate the impacts of the ongoing drought in the Colorado River Basin. These activities include implementation of a Lower Basin Drought Contingency Plan (currently in negotiation with various stakeholders) and continuation of the Pilot System Conservation Program. Both of these initiatives are Federal/non-Federal cost share activities that create system water in Lake Mead through conservation thereby helping to protect critical elevations in Lake Mead. Funding is also for expenditures for efficiency and operations improvements to replace, recover, and reduce system losses from the Colorado River system and for continued creation of system water to meet Federal "Protection Volume" goals established in a December 10, 2014 Memorandum of Understanding (MOU) for Drought Response Actions among Reclamation, the Lower Basin States, and junior priority water users.

Continues activities building on recommendations made during previous phases of the Colorado River Basin Study (CRBS). 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. Funding provides for implementation costs to continue monitoring the long-term conservation efforts established under the study's phases. \$1,108,000

<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 guidelines for unlawful use of water from the lower Colorado River including taking necessary action to reduce or eliminate the unlawful use of water. \$685.000

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 guidance 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. \$2,336,000

Bi-National Activity - Minute 323 Implementation/Monitoring - Minute 323 to the 1944 Treaty entered into force on September 27, 2017 and remains in effect through December 31, 2026. Minute 323 builds upon Minute 319 and provides operational certainty regarding deliveries to Mexico, including reductions and water savings at specific Lake Mead elevations, investment to conserve Colorado River water supplies, and enhancement of environmental and riparian resources until 2026. Minute 323 includes a new concept of a "Water Scarcity Contingency Plan", whereby additional water savings will be implemented by Mexico when Lake Mead reaches certain low elevation reservoir conditions. Key components of Minute 323 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 environmental flows to the lower Colorado River Delta area to benefit the riparian ecosystem, develop and test water exchange mechanisms in consideration of infrastructure investments, and additional immediate measures to protect and benefit the Colorado River system by seeking to avoid reaching critical reservoir elevations at Lake Mead. The pilot program will allow both countries to better assess the long-term opportunities and success of cooperative measures for water conservation, management, and development. Reclamation's obligations under Minute 323 include \$16.5 million through 2026 and will result in system water and water for the environment commitments as outlined in the agreement. Water for the U.S. environmental commitments will be provided in the first five years of the Minute. Therefore, funding in the amount of \$9.625 million will be required by 2022, and the remaining \$6.875 million will be required throughout the term of the Minute. The Minute also outlines the \$3 million U.S. commitment for environmental enhancement (required during the first three years of the Minute by 2020) and the \$3 million U.S. commitment for monitoring of the Colorado River Limitrophe and its associated Delta (required throughout the term of the Minute through December 31, 2026). Successful implementation of Minute 323 is critical for long-term cooperation with Mexico and is a top priority of the Secretary. \$4,078,000

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 impacts of increased hydrologic variability.

\$741,000

Subtotal, Water and Energy Management and Development

\$14,448,000

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 27 species, including the federally endangered razorback sucker, bonytail chub, southwestern willow flycatcher, yellow-billed cuckoo, and Yuma clapper rail.

<u>Fish Augmentation</u> - 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.

\$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.

\$10,496,000

Conservation Area Development and Management - 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 13 conservation areas including Palo Verde Ecological Reserve, Cibola Valley Conservation Area, and Cibola National Refuge.

\$14.004.000

<u>Post-Development Monitoring</u> - 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. In FY 2020, the post-development monitoring will be required for over 5,500 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

<u>Adaptive Management Program</u> - 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. \$1,968,000

Administration - Program administration provides senior support and administrative support to manage implementation year number 14 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. \$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

\$31,299,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$1,550,000	\$50,000
Enacted/Request	\$1,550,000	\$50,000
Non-Federal	\$750,000	\$0
Prior Year Funds	\$0	\$0
Total Program	\$2,300,000	\$50,000
Prior Year Funds/Non-Federal	(\$750,000)	\$0
Total Reclamation Allotment	\$1,550,000	\$50,000

Total Cost Information*

	Total Estimated Cost	Total through 9/30/18	FY 2019	FY 2020	Balance to Complete
Reclamation ^{1/}	\$47,000,000	\$22,483,476 ^{3/4/}	\$1,550,000	\$50,000	\$22,916,5244/
Non-Federal ^{1/2/}	\$47,000,000	\$52,770,910 ^{2/4/}	\$750,000	\$0	(\$6,520,910) 4/
Total ^{5/}	\$94,000,000	\$75,254,386	\$2,300,000	\$50,000	\$16,395,6144/5

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

Construction Cost Allocation and Methodology

Allocation	FY 2019	FY 2020
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 2020:

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.

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 2019 and FY 2020 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 cost of all projects approved for construction is \$75,254,386. Reclamation has contributed \$22,483,476. The remaining balance of Reclamation's 50% cost share for approved projects is \$16,395,614; and the remaining balance of Reclamation's authorized cost share for the entire program is \$22,916,524.

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 two-thirds of the project lands are in Montana and one-third in North Dakota.

DESCRIPTION/JUSTIFICATION: The Lower Yellowstone Project (Project) consists of the Lower Yellowstone Intake Diversion Dam, Thomas Point Pumping Plant, four small pumps on the Yellowstone River, 72 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 28,000 acres of land along the Yellowstone River. More recently Reclamation has been working with the U.S. Army Corps of Engineers (Corps) to provide fish passage and entrainment protection at the Intake Diversion Dam for pallid sturgeon. All project facilities are operated and maintained by the Lower Yellowstone Irrigation Project Joint Board of Control.

The Water Resources Development Act of 2007 authorized the 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 fish screens in FY 2012.

Reclamation coordinates with the Corps to complete planning and associated environmental compliance to address endangered pallid sturgeon passage at the Intake Diversion Dam. Monitoring for Project effects (passage and entrainment) and translocation of pallid sturgeon will continue consistent with the Biological Opinion under Section 7 of the Endangered Species Act (ESA).

The legal challenge by environmental groups on Corps' and Reclamation's 2016 Record of Decision to implement a fish bypass and diversion dam modification was resolved in 2018. The Corps has awarded a construction contract, but the notice to proceed is pending. Construction is anticipated to commence after procurement issues are resolved.

AUTHORIZATION: The Reclamation Act of 1902, June 17, 1902 (authorized by the Secretary of the Interior on May 10, 1904).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Fish and Wildlife Management and Development	\$716,000	\$699,000
Facility Operations	\$16,000	\$23,000
Facility Maintenance and Rehabilitation	\$14,000	\$0
Enacted/Request	\$746,000	\$722,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$746,000	\$722,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$746,000	\$722,000

WORK PROPOSED FOR FY 2020:

Fish and Wildlife Management and Development - Continues oversight and coordination with the Corps and U.S. Fish and Wildlife Service for planning, monitoring, and translocation of pallid sturgeon consistent with the Biological Opinion under Section 7 of the ESA for passage implementation and continued Project effects. Continues necessary environmental compliance and ESA consultations resulting from Project operations, maintenance, and implementation of a Corps funded passage project. Continues administrative and technical support activities to implement a fish bypass and diversion dam modification project. Monitoring requirements as described in the 2016 Record of Decision, Biological Opinion, and Adaptive Management Plan will continue. **\$699,000**

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. Facility Operations funding is adjusted within the projects to meet the scheduled O&M needs for FY 2020. **\$23,000**

Reclamation Request \$722,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019	FY 2020
1200.109	Enacted	President's Budget
Water and Energy Management and Development	\$48,000	\$50,000
Land Management and Development	\$30,000	\$50,000
Facility Operations	\$140,000	\$265,000
Facility Maintenance and Rehabilitation	\$1,130,000	\$413,000
Request	\$1,348,000	\$778,000
Non-Federal	\$13,000	\$13,000
Prior Year Funds	\$22,648	\$0
Total Program	\$1,383,648	\$791,000
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	(\$35,648)	(\$13,000)
Total Reclamation Allotment	\$1,348,000	\$778,000

WORK PROPOSED FOR FY 2020:

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. \$50,000

Land Management and Development - Continues land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. Increase is due to realignment of project priorities and project coordination programs. \$50,000

Facility Operations - Begins program development and coordination of regional database and oversight of the Geographical Information System. Continues operation and maintenance activities for the costshare 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 at Jackson Gulch Dam. Increase is due to Title Transfer inspection and associated activities and development of metadata for the National Geospatial Data Clearinghouse as part of the National Spatial Data Infrastructure. \$278,000 Non-Federal (State of Colorado)

Subtotal, Facility Operations

\$265,000

(\$13,000)

Facility Maintenance and Rehabilitation - Continues inventory, inspection, and maintenance of a bridge, instrumentation maintenance and data review, and examination of existing structures to ensure public safety through the identification of operation and maintenance deficiencies and dam safety concerns. \$413,000

\$778,000 **Reclamation Request**

McGee Creek Project

LOCATION: The McGee Creek Project (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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	Activity FY 2019 Enacted	
Water and Energy Management and Development	\$26,000	\$5,000
Land Management and Development	\$66,000	\$10,000
Fish and Wildlife Management and Development	\$32,000	\$5,000
Facility Operations	\$830,000	\$821,000
Facility Maintenance and Rehabilitation	\$5,000	\$5,000
Enacted/Request	\$959,000	\$846,000
Non-Federal	\$59,000	\$0
Prior Year Funds	\$0	\$0
Total Program	\$1,018,000	\$846,000
Prior Year Funds/Non-Federal	(\$59,000)	\$0
Total Reclamation Allotment	\$959,000	\$846,000

WORK PROPOSED FOR FY 2020:

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. Reduced water conservation plan and strategies activities required in FY 2020. \$5,000

Land Management and Development - Funding will be used to improve recreation facilities and to comply with health, safety, and accessibility requirements at the project. Funding prioritized to meet mission critical activities under Facility Operations and Facility Maintenance and Rehabilitation.

\$10,000

Fish and Wildlife Management and Development - Continues conservation measures and new annual survey requirements for the endangered American burying beetle. Less funding is requested due to fewer survey requirements in FY 2020. **\$5,000**

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, wildland fire management, and administering land management programs. Continues cultural resources site protection activities for resources associated with the Project. \$821,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam. \$5,000

Reclamation Request \$846,000

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 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 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 2020:

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 Waterfowl Production Area.

Reclamation Request \$15,000

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 about 43,000 acre-feet of water per year for irrigation and human consumption to over one million people, maintains valley drainage, and provides flood protection. The Middle Rio Grande Conservancy District operates and maintains under contract with Reclamation the three diversion dams, 202 miles of canals, 405 miles of drains, and 580 miles of laterals to preserve and protect Federal investments. The natural hydrological effects of the river's flow create some of the highest sediment loads in the world, which requires ongoing life cycle maintenance on the river channel, through Reclamation's river maintenance program, to maintain and ensure our ability to deliver water.

As a way of reducing the potential for litigation the Middle Rio Grande Endangered Species Collaborative Program (currently composed of sixteen signatories including State, Federal, Tribal, and local entities) 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Number of threatened and endangered species (T&E) recovery activities implemented

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$850,000	\$800,000
Land Management and Development	\$285,000	\$1,100,000
Fish and Wildlife Management and Development	\$14,649,000	\$10,561,000
Facility Operations	\$12,352,000	\$9,771,000
Facility Maintenance and Rehabilitation	\$214,000	\$350,000
Request	\$28,350,000	\$22,582,000
Non-Federal	\$875,000	\$750,000
Prior Year Funds	\$1,232,647	\$0
Total Program	\$30,457,647	\$23,332,000
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	(\$2,107,647)	(\$750,000)
Total Reclamation Allotment	\$28,350,000	\$22,582,000

WORK PROPOSED FOR FY 2020:

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, in accordance with the 2016 Middle Rio Grande Endangered Species Act (ESA) Biological Opinion (2016 MRG BO), through efforts to conserve the Rio Grande Silvery Minnow, Southwestern Willow Flycatcher, and Yellow-Billed Cuckoo. Continues support of Native American negotiations. Continues oversight and administration of contracts, repayment, and water rights monitoring. Continues area office essential management functions, e.g., manager meetings, policy reviews, external discussions and contacts.

Land Management and Development - Continues land resource management tasks, including administration and oversight of contracts, hazardous waste inventories, permits for grants and license agreements, inventories of Reclamation rights-of-way, ESA, National Historic Preservation Act, National Environmental Policy Act, and Clean Water Act compliance. Increase due to Geographical Information System capabilities, updating Light Detection and Ranging data to design habitat restoration and channel capacity, Bosque restoration, and riverine habitat enhancement. \$1,100,000

Fish and Wildlife Management and Development - Continues studies to assess the impact and/or affect Reclamation operation and maintenance and other construction activities (such as mowing, road grading, equipment repair, etc.) have on the Federally listed Rio Grande Silvery Minnow, Southwestern Willow Flycatcher, and Yellow-Billed Cuckoo. Implements requirements of the 2016 MRG BO. 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. 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. Less funding is requested because of the planned completion of Isleta Settlement Bosque Restoration Activities with prior year funds as well as other restoration activities.

Non-Federal (Collaborative Program partners)

\$6,335,500 (\$750,000) \$5,585,000

Continues support of ESA efforts through acquisition of supplemental non-Federal water and pumping from the LFCC into the Rio Grande during irrigation season. Less funding is requested because of the planned completion of Native Water Leasing Pilot Program Activities with prior year funds.

\$4,975,500

Subtotal, Fish and Wildlife Management and Development

\$10,561,000

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. \$759,000

Continues recurring river maintenance and restoration work on the Rio Grande and the LFCC to ensure water delivery to Elephant Butte Reservoir and the protection of project infrastructure. This work helps to meet water delivery needs for Rio Grande Compact States and international treaty obligations to Mexico. Ongoing maintenance includes: development of bank protection to protect project infrastructure, annual sediment removal from the river channel, water salvage drains rehabilitation, riprap material replacement, vegetation management, equipment repairs, and road grading to protect Federal investments and the public. Recurring maintenance caused by river sediment accumulation is necessary at approximately six alternating priority sites per year, though the number of priority sites is dynamic. The Middle Rio Grande Channel is continually monitored, with risks evaluated, and repairs prioritized. The site prioritization process is essential to ensuring uninterrupted, efficient water delivery to Elephant Butte Reservoirs well as reducing, mitigating or eliminating risks to the public, property, or the project.

\$9.012.000

Subtotal, Facility Operations

\$9,771,000

Facility Maintenance and Rehabilitation - Continues funding for facility reviews on El Vado Dam (a high hazard dam), the three diversion dams, over 1,000 miles of canals and laterals, and equipment replacement. Particular focus will be annual inspections of urbanized canals in the Albuquerque area that pose a risk of life and property loss in the event of failure. Increase due to expected labor increases because of the requirement for periodic inspections of urbanized canals. \$350,000

Reclamation Request

\$22,582,000

Milk River Project

LOCATION: This project is located in Blaine, Glacier, Hill, Phillips, and Valley counties in north-central 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 project delivers approximately 265,000 acre-feet of water each year. 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 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$129,000	\$148,000
Fish and Wildlife Management and Development	\$318,000	\$252,000
Facility Operations	\$1,010,000	\$1,111,000
Facility Maintenance and Rehabilitation	\$457,000	\$1,940,000
Enacted/Request	\$1,914,000	\$3,451,000
Non-Federal	\$573,000	\$374,000
Prior Year Funds	\$0	\$0
Total Program	\$2,487,000	\$3,825,000
Prior Year Funds/Non-Federal	(\$573,000)	(\$374,000)
Total Reclamation Allotment	\$1,914,000	\$3,451,000

WORK PROPOSED FOR FY 2020:

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 technical assistance in the evaluation of proposed conservation measures and demonstration projects identified in conservation plans.

\$198,000

Non-Federal Participation - Milk River Water Users

(\$50,000)

Subtotal, Water and Energy Management and Development

\$148,000

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. \$252,000

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 non-reimbursable 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, weed management, and hazardous waste management.

\$1,435,000

Non-Federal Participation - 8 Irrigation Districts and 205 pump contracts

(\$324,000)

Subtotal, Facility Operations

\$1,111,000

Facility Maintenance and Rehabilitation —Continues St. Mary storage unit drop 2 concrete repair, Fresno Dam field office replacement, St. Mary storage unit drop 5 concrete repair, and design of the St. Mary Diversion Dam fish screens. 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. The funding varies depending on the type of required annual inspections at the dam. Increase due to the scheduled construction contract award for the Drop 5 concrete repair.

Reclamation Request \$3,451,000

Minidoka Area Projects

LOCATION: Southeastern Idaho, eastern Idaho, and a small portion of western Wyoming

DESCRIPTION/JUSTIFICATION: Features of this project consist of eight multipurpose dams, which annually deliver about 1.7 million acre-feet of water to provide irrigation to about 1.2 million acres of land. Project features also include associated reservoirs (including Minidoka, American Falls, Jackson Lake, Island Park, Grassy Lake, Palisades, Ririe, and Little Wood), four wildlife mitigation areas, five recreation areas on reservoirs, switchyards and their transmission lines, and their associated three power plants with a combined generating capacity of 195,900 kilowatts and annual generation of over 990 million kilowatt-hours. 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 n 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. 97-293, Title II, Reclamation Reform Act, October 12,1982, as amended; 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. 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; P.L. 104-266, Reclamation Recycling and Water Conservation Act of 1996, October 9, 1996; H.R. 5895 Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, 2019, September 21, 2018.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility, Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$550,000	\$442,000
Land Management and Development	\$1,178,000	\$1,250,000
Fish and Wildlife Management and Development	\$460,000	\$345,000
Facility Operations	\$2,599,000	\$2,695,000
Facility Maintenance and Rehabilitation	\$1,905,000	\$456,000
Request	\$6,692,000	\$5,188,000
Non-Federal	\$2,182,000	\$5,750,000
Other Federal – BPA Direct Funding	\$9,604,000	\$10,572,000
Other Federal – BPA Subagreements	\$486,000	\$25,000
Other Federal – BPA Small Capital	\$1,205,000	\$185,000
Prior Year Funds	\$0	\$0
Total Program	\$20,169,000	\$21,720,000
Prior Year Funds/Non Federal	(\$13,477,000)	(\$16,532,000)
Total Reclamation Allotment	\$6,692,000	\$5,188,000

WORK PROPOSED FOR FY 2020:

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 other storage contract holders. Provides water management benefits through technical assistance with contractors to encourage more efficient use of water supplies and the practice of water conservation to aid in overall water conservation savings as well as the protection of threatened and endangered species within the Minidoka Area Project. Other - Continues to provide resources to monitor unauthorized use of water. Continues cooperative efforts between irrigation districts, the State of Idaho and Reclamation by monitoring water quality and quantity. Continues development of conservation partnership agreements with the Minidoka Project water contractors and others to foster improved water management. Continues development of RiverWare models for the Upper Snake River. Works with the U.S. Army Corps of Engineers (USACE) and the Northwest River Forecast Center in the management and development of forecasting models. Continue coordination with Natural Resource Conservation Service for precipitation tracking and monitoring. Continues program management support for planning activities. \$442,000

Land Management and Development - Continues land management activities associated with project lands such as; weed control, wetland management, invasive species management, fire rehabilitation and updating resource management plans. Continues to conduct public outreach activities to provide educational information and to maintain transparency in support of Reclamation's mission. Continues to meet customer service requests daily including issuing crossing agreements, right-of-way agreements, grazing permits, leases, and other administrative land issues. Continues work to efficiently resolve land use conflicts, unauthorized use, and disposal of lands not needed for project purposes. Continues to complete necessary hazardous material surveys for land acquisition, disposal, and cleanup of unauthorized dump sites.

Continues updating the withdrawal review reports and submitting necessary hazardous material surveys for lands to be relinquished. Continues to construct and maintain fencing to protect project lands and related assets. Continues improving the efficiency of data management on project lands and related assets with 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 project activities. Continues to conduct biological evaluation and monitoring of authorized grazing use schedules to prevent erosion and reduce fuel loads to prevent wildland fire. Continues compliance with Native American Treaty Rights for protection of the American Falls Archaeological District. Continues planning, design, and implementing activities for the protection of cultural resources. Continues to monitor and employ best management practices to control or eradicate invasive non-native species and noxious weeds to support habitat for fish and wildlife with cooperative weed management entities throughout the Minidoka Area Project. Continues to engage third party interests in developing plans and cooperative agreements for recreation development and accessibility compliance. Reclamation Recreation Management Act, Title XXVIII - Continues cost-share to assist with operation and maintenance repairs of continuing damage of dilapidated structures and diseased tree removal for public health and safety at Sportsman's Park. Continues a cost-share agreement to operate and maintain American Falls West Boat Ramp. \$1,270,000 Non-Federal - Various (\$20,000)

Subtotal, Land Management and Development

\$1,250,000

Fish and Wildlife Management and Development - Continues planning, designing, and implementing activities for the protection of fish and wildlife habitats. Continues responding to requests from natural resource agencies for project operational data relevant to fish and wildlife issues on projects. Continues to review other agencies' NEPA documents and plans which may affect project operations. Continues Teton River channel restoration activities. Continues implementing activities and projects to facilitate Teton River corridor habitat improvements. Continues detailed surveys for identification of invasive aquatic plant and invertebrate species, monitors treatments, and maintains record of surveys and treatments. Continues monitoring and management of fish and wildlife resources on Reclamation administered lands in conjunction with the Idaho Fish and Game (IDFG). Continues coordination and collaboration with the U.S. Fish & Wildlife Service (USFWS), Bureau of Land Management, USACE, Shoshone-Bannock Tribes, and IDFG in the implementation and administration of mitigation lands and projects associated with various Reclamation projects. Biological Opinion (BiOp) Implementation -Continues compliance with the National Marine Fisheries Service's 2008 BiOp by coordinating, reporting, and implementing flow augmentation requirements. Continues monitoring, reporting, and implementation of the 2015 Snake River BiOp activities for ESA listed Snake River physa snails in coordination with the USFWS. \$345,000

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 fishery and other natural resource responses to Palisades Dam water operations. Continues implementation of mitigation measures identified in the Minidoka Spillway Replacement project environmental impact statement. Continues the management and oversight of the ongoing mitigation for habitat lost during the construction of the Ririe Dam, relevant to Tex Creek and Cartier Slough Wildlife Management Areas.

<u>Power Items</u> - Begins Inman powerplant stoplogs rehabilitation. Continues Minidoka powerplant battery replacement. Begins the Minidoka powerplant interior repairs, as a result of the roof drainage system deficiency. Continues BPA directed funding for day to day operations of Palisades, Minidoka, and Inman power plants under the direct funding agreement with BPA. Continues the Minidoka and Palisades power periodic facility review, and comprehensive facility reviews. Continues the Minidoka Unit 7 draft tube

Minidoka Project

stop logs and gates concrete repair project. Continues the Palisades generator CO2 fire suppression system rehabilitation. Continues the Palisades maintenance building rehabilitation design. Continues the Palisades powerplant potable water system. Completes the Inman turbine rehabilitation project which will rebuild the turbine hubs and replace the wicket gates. Completes the Minidoka and Inman powerplant roof drainage system repairs. Completes the Palisades rear-staging area paving project. Completes the Palisades powerplant control room heating, ventilation, and air conditioning replacement.

	Ψ17,207,000
Other Federal - BPA Direct Funding	(\$10,572,000)
Other Federal - BPA Subagreements	(\$25,000)
Other Federal - BPA Small Capital	(\$185,000)
Non-Federal - Various	(\$5,730,000)

Subtotal, Facility Operations

\$2,695,000

Facility Maintenance and Rehabilitation - Begins Palisades maintenance buildings assessment and rehabilitation. Maintenance is required to mitigate paint deterioration on metal buildings, without mitigation the buildings are vulnerable to corrosion and deterioration, which will require lead abatement and removal. Failure to implement the rehabilitation will result in the continued shedding of lead based paint allowing the metal to rust and deteriorate, posing a health hazard to the employees and resulting in the buildings being unusable due to heath risks and potential damage to government equipment. 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. Continues the Palisades hollow jet valve replacement. The existing valve coating from 1954 is failing and showing corrosion, requiring replacement of the valve. Failure to implement the replacement on this valve will lead to additional corrosion and deterioration and will greatly increase costs. Continues the Palisades government camp domestic water system replacement. The existing government camp water system and potable water tank constructed in 1950 has exterior and interior coatings that are failing. Failure to implement the repairs will put Reclamation at risk of not meeting the Environmental Protection Agency's potable water standards, increasing repair costs, and system failure resulting in loss of domestic water for the government camp.

\$456,000

Reclamation Request \$5,188,000

Mirage Flats Project

LOCATION: This project is located in Dawes and Sheridan Counties 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 provides about 10,000 acre-feet of water per year to 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

1 Togram P manetar Data		
Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$13,000	\$10,000
Facility Operations	\$93,000	\$69,000
Facility Maintenance and Rehabilitation	\$5,000	\$5,000
Enacted/Request	\$111,000	\$84,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$111,000	\$84,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$111,000	\$84,000

WORK PROPOSED FOR FY 2020:

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 demonstration projects identified in conservation plans which promote effective water management and conservation.

\$10,000

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. \$69,000

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.

\$5,000\$

Reclamation Request \$84,000

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) (Act) applies to planning, design, construction, and operation. The project scope consists of constructing new systems and facilities, as well as providing water to over 40 existing Mni Wiconi community systems, in order to serve approximately 5,000 rural residences. At full-build-out, the project will serve approximately 55,000 people. Responsibilities of the Secretary of Interior, 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$13,475,000	\$13,094,000
Facility Maintenance	0	7,000
Enacted/Request	\$13,475,000	\$13,101,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$13,475,000	\$13,101,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$13,475,000	\$13,101,000

WORK PROPOSED FOR FY 2020:

Facility Operations - Funds are provided for the operation, maintenance and replacement of system features on the Indian reservations. Funds include costs for Tribal contracts and Reclamation oversight and technical assistance. \$13,094,000

Facility Maintenance and Rehabilitation - Funds a periodic Associated Facility Review of the Rosebud Sioux Tribe facilities. Review is required every four years and consists of a field examination of the project facilities to identify deficiencies and issues at early stages and promote preventive maintenance. Increase due to O&M review requirements in FY 2020. **\$7,000**

Reclamation Request \$13,101,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$9,000	\$9,000
Land Management and Development	\$10,000	\$12,000
Facility Operations	\$56,000	\$73,000
Facility Maintenance and Rehabilitation	\$49,000	\$28,000
Enacted/Request	\$124,000	\$122,000
Non-Federal	\$0	\$0
Prior Year Funds	\$18,100	\$0
Total Program	\$142,100	\$122,000
Prior Year Funds/Non-Federal	(\$18,100)	\$0
Total Reclamation Allotment	\$124,000	\$122,000

WORK PROPOSED FOR FY 2020:

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 oversight and administration of contract repayment. \$9,000

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. **\$12,000**

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. The increase is a result of realignment of project-based priorities as a result of planned changes in scheduled project requirements. \$73,000

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.

\$28,000

Reclamation Request \$122,000

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 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, 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$25,000	\$22,000
Land Management and Development	\$9,000	\$9,000
Facility Operations	\$627,000	\$587,000
Facility Maintenance and Rehabilitation	\$46,000	\$13,000
Enacted/Request	\$707,000	\$631,000
Non-Federal	\$9,000	\$5,000
Prior Year Funds	\$0	\$0
Total Program	\$716,000	\$636,000
Prior Year Funds/Non-Federal	(\$9,000)	(\$5,000)
Total Reclamation Allotment	\$707,000	\$631,000

WORK PROPOSED FOR FY 2020:

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. \$27,000

Non-Federal - Mountain Park Master Conservancy District

(\$5,000)

Subtotal, Water and Energy Management and Development

\$22,000

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. \$9,000

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. Continues National Environmental Policy Act compliance and administering land management programs. Continues cultural resources site protection activities for resources associated with the Project. \$587,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam. Less funding is requested as special examination requirements in FY 2019 are not required in FY 2020. **\$13,000**

Reclamation Request \$631,000

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 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 (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. Mandatory funding, however, is not authorized for fiscal years 2015 through 2019. Additionally, beginning in FY 2020, P.L 111-11 authorizes the Navajo Gallup Water Supply Project to use up to \$500.0 million from the Fund, as the mandatory funds become available. The Navajo-Gallup Water Supply project will complete construction by December 31, 2024.

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.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022

Mission Area1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 6: Modernizing Our Organization and Infrastructure for the Next 100 Years Goal #3: Prioritize DOI infrastructure needs and reduce deferred maintenance backlog Measure: Percent of museum collections on DOI inventory in good condition

COMPLETION DATA: Pursuant to P.L. 111-11, required activities must be completed by December 2024.

SUMMARIZED FINANCIAL DATA

Activity	FY 2019	FY 2020
Tienvity	Enacted	President's Budget
Water and Energy Management and Development	\$62,475,000	\$62,632,000
Land Management and Development	\$6,450,000	\$3,350,000
Fish and Wildlife Management and Development	\$7,000	\$200,000
Facility Operations	\$671,000	\$3,000,000
Request	\$69,603,000	\$69,182,000
Other Federal – Permanent Mandatory Authority ^{1/}	\$0	\$97,400,000
Non-Federal ^{2/}	\$6,803,000	\$13,158,000
Prior Year Funds	\$592,836	\$0
Total Program	\$76,998,836	\$179,740,000
Other Federal – Permanent Mandatory Authority	\$0	(\$97,400,000)
Prior Year Funds/Non-Federal	(\$7,395,836)	(\$13,158,000)
Total Reclamation Allotment	\$69,603,000	\$69,182,000

¹/Reclamation Water Settlements Fund, P.L. 111-11, section 10501.

²/ Represents an estimate of contributed funds to be received from the City of Gallup and the Jicarilla Apache Nation via their respective prepayment agreements, in addition to State of New Mexico cost share received and credited.

Total Cost Information – Construction Funding Only

	Total Estimated Cost ^{1/}	Total to 9/30/18	FY 2019 Enacted	FY 2020 President's Budget	Balance to Complete ^{6/}
Reclamation	\$683,500,000	\$457,572,912	\$67,400,000	\$66,132,000	\$92,395,088
Other Federal – Permanent Mandatory Authority ^{2/}	\$680,000,000	\$180,000,000	\$0	\$97,400,000	\$402,600,000
Federal Total	\$1,363,500,000	\$637,572,912	\$67,400,000	\$163,532,000	\$494,995,088
Cost-Sharing ^{3/}	\$13,600,000	\$13,600,000	\$0	\$0	\$0
Other ^{4/}	\$77,005,000	\$16,762,000	\$6,803,000	\$13,158,000	\$40,282,000
Total	\$1,454,105,000 ^{5/}	\$667,934,912	\$74,203,000	\$176,690,000	\$535,277,088

^{1/} Actual appropriations are subject to change based upon the amount of funding received from the Reclamation Water Settlement Fund established in P.L. 111-11 beginning in FY 2020.

COST-SHARING: Legislation requires the State of New Mexico to provide not less than \$50.0 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 have been completed for both the Jicarilla Apache Nation and the city of Gallup. It has been determined that both entities are required to pre-pay or re-pay 35 percent of their allocated cost of project construction.

Cost Allocation and Methodology^{1/}

Allocation	FY 2019	FY 2020 ^{2/}
Total	\$1,363,500,000	\$1,363,500,000

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

²/ Mandatory funding authorized by P.L. 111-291 and P.L 111-11.

^{3/} Represents Cost-Share received from the State of New Mexico. The remainder of the State's \$50.0 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 construction funds and Mandatory (Other Federal) funds make up the total shown in the appropriation ceiling. Reclamation's non-construction funding request (for management, administration, and operations of substantially complete reaches) and all other funding sources 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.

²/Indexed CCE value will be prepared in 2019.

involved. The current appropriation ceiling at the October 2018 (FY 2019) price level is \$1,363,500,000. The indexed FY 2021 Construction Cost Estimate (CCE) will be prepared in 2019.

WORK PROPOSED FOR FY 2020:

Work to be Performed with Construction Funding:

Water and Energy Management and Development - Continues oversight, management, coordination, and construction on the San Juan Lateral and the Cutter Lateral. Provides for the continued commissioning of the Cutter Water Treatment Plant and initial operation of the Cutter Lateral (Reaches 21 through 26). On the San Juan Lateral, provides for the completion of construction on Reach 12.1 and Reach 12.2 and the continuation of construction on Block 4C-8. Provides for final design of the San Juan Water Treatment Plant to commence. Construction will begin on Pumping Plants 4 and 7, Block 3-4B and Shiprock Connection, and for Reach 1, and the Intake Structure on the San Juan River. Construction activities will continue on Reach 27. Continues oversight, management, coordination of design, data collection, right-of-way acquisition, and final design for facilities targeted to begin construction in FY 2020, and beyond. Continues activities in support of compliance for the National Environmental Policy Act and other environmental standards (Clean Water and Clean Air Acts, management of hazardous materials, etc.) affecting project construction. Mandatory funding (pursuant to P.L. 111-111) would be utilized to supplement appropriations in FY 2020 through FY 2024. \$173,190,000 Reclamation Water Settlements Fund (\$97,400,000) Non-Federal (City of Gallup and Jicarilla Apache Nation) (\$13,158,000)

Subtotal, Water and Energy Management and Development

\$62,582,000

Land Management and Development - Continues activities in support of compliance for the National Historic Preservation Act. 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. Less funding is requested due to anticipated lower archaeological site densities in active project work areas. \$3,350,000

Fish and Wildlife Management and Development - Continues activities in support of fish and wildlife protection commitments associated with the Endangered Species Act, US Fish and Wildlife Coordination Act, and other Federal, State, and Tribal programs. Continues fish and wildlife mitigation planning on Reach 1. Increase is due to high potential of Threatened and Endangered Species and wetlands in areas of FY 2020 construction on the San Juan Water Treatment Plant and San Juan River. **\$200,000**

Total Construction Budget

\$66,132,000

Work to be Performed with Non-Construction Funding:

Water and Energy Management and Development - Continues management and administration of repayment, excess capacity, and OM&R contracts; performs water quality investigations; researches and defends water rights; and forecasts water supply for the project. \$50,000

Facility Operations - Continues operation and maintenance (O&M) on Cutter Lateral. Continues administration of operations contract on substantially complete Reaches, and provides support related to water supply forecasting. O&M is required until The Navajo Nation assumes responsibility for the entire project. Increase is due to O&M payment to Navajo Nation for Cutter Water Treatment Plant.

\$3,000,000

Total Non-Construction Budget

\$3,050,000

Total Reclamation Request

\$69,182,000

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 stores supplemental irrigation water in Newton Reservoir. The reservoir replaced an older privately constructed reservoir of lesser 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$8,000	\$8,000
Land Management and Development	\$42,000	\$57,000
Facility Operations	\$60,000	\$71,000
Facility Maintenance and Rehabilitation	\$44,000	\$49,000
Enacted/Request	\$154,000	\$185,000
Non-Federal	\$0	\$0
Prior Year Funds	\$13,270	\$0
Total Program	\$167,270	\$185,000
Prior Year Funds/Non-Federal	(\$13,270)	\$0
Total Reclamation Allotment	\$154,000	\$185,000

WORK PROPOSED FOR FY 2020:

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 oversight and administration of contract repayment. \$8,000

Land Management and Development - Continues land resources management, to include asset inventory system database management, Geographic Information System activities, 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. Increase is due to increased efforts to develop a Geographical Information System for project features. \$57,000

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. Continues recreation operation for project facilities. \$71,000

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.

\$49,000

Reclamation Request \$185,000

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 municipal and industrial 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. This results in 21,600 acre-feet of Municipal and Industrial water contracted annually, and approximately 1,640,000 recreational visitors each year.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$17,000	\$22,000
Land Management and Development	\$55,000	\$55,000
Facility Operations	\$298,000	\$305,000
Facility Maintenance and Rehabilitation	\$12,000	\$55,000
Enacted/Request	\$382,000	\$437,000
Non-Federal	\$30,000	\$35,000
Prior Year Funds	\$0	\$0
Total Program	\$412,000	\$472,000
Prior Year Funds/Non-Federal	(\$30,000)	(\$35,000)
Total Reclamation Allotment	\$382,000	\$437,000

WORK PROPOSED FOR FY 2020:

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. \$27,000

Non-Federal – Oklahoma Tourism and Recreation Department (\$5,000)

Subtotal, Land Management and Development

\$22,000

Land Management and Development - Funds will be used to improve recreation facilities and to comply with health, safety, and accessibility requirements at the project. \$85,000 Non-Federal - Oklahoma Tourism and Recreation Department (\$30,000)

Subtotal, Land Management and Development

\$55,000

Facility Operations - 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 programs. Continues cultural resources site protection activities for resources associated with the project. \$305,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam. Increase in funding is due to special examination requirements in FY 2020.

\$55,000

Reclamation Request \$437,000

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. The North Platte Project (Project) service area extends 111 miles along the North Platte River Valley from near Guernsey, Wyoming, to below Bridgeport, Nebraska.

DESCRIPTION/JUSTIFICATION: The Project delivers approximately 954,000 acre-feet per year. 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.

Under the appropriation Operation, Maintenance and Replacement of Project Works (P.L. 85-123), revenues are derived from the operation and project powerplants, leasing of project grazing and farm lands, and the sale or use of townsites. The monies are collected and disbursed when the funds reach \$10,000. Revenues may be expended for the operation and maintenance of the project works operated by the water users. It is applied first to the Districts' share of operation and maintenance charges, second to construction charges, and finally as directed by the Districts. The Districts included are Gering and Fort Laramie, Goshen and Pathfinder Irrigation Districts.

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 Operation, Maintenance and Replacement of Project Works (P.L. 85-123).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility

Reliability Rating (FRR) [high-and significant hazard dams]

Measure: Amount of acre feet of water conservation capacity enabled to help address drought.

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measures: Percent of hydropower facilities in good condition as measured by the Facility Reliability

Rating (FRR)

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$51,000	\$30,000
Land Management and Development	\$143,000	\$13,000
Fish and Wildlife Management and Development	\$14,000	\$14,000
Facility Operations	\$1,100,000	\$1,410,000
Facility Maintenance and Rehabilitation	\$109,000	\$74,000
Enacted/Request	\$1,417,000	\$1,541,000
Non-Federal	\$2,696,000	\$352,000
Prior Year Funds	\$0	\$0
Total Program	\$4,113,000	\$1,893,000
Prior Year Funds/Non-Federal	(\$2,696,000)	(\$352,000)
Total Reclamation Allotment	\$1,417,000	\$1,541,000

WORK PROPOSED FOR FY 2020:

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. \$30,000

Land Management and Development - Continues development of recreation facilities to ensure facilities that comply with health, safety, and accessibility standards at Guernsey Reservoir. Less funding

is requested because "Additional Funding for Ongoing Work" provided by Congress in FY 2019 was allocated in part to perform infrastructure upgrades at Lakeview Campground. \$26,000 Non-Federal - State of Wyoming (\$13,000)

Subtotal, Land Management and Development

\$13,000

Fish and Wildlife Management and Development - Participates in the preparation of National Environmental Policy Act document information, Endangered Species Act (ESA) Biological Assessment information, and Fish and Wildlife Coordination Act Report information for North Platte River Projects and as a Cooperating Agency as invited on other agency's development of environmental documents to comply with ESA and other laws. \$14,000

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.

\$1,742,000

Non-Federal - Farmer's Irrigation District, Pathfinder Irrigation District, and others (\$332,000)

Subtotal, Facility Operations

\$1,410,000

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. The funding varies depending on the type of required annual inspections at the dam. \$81,000

Non-Federal Participation – Bureau of Land Management and other partners

(\$7,000)

Subtotal, Facility Maintenance and Rehabilitation

\$74,000

Reclamation Request

\$1,541,000

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 recreation facilities at the reservoir. The City of Corpus Christi operates and maintains 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. This results in 139,000 acre-feet of Municipal and Industrial water contract annually, and over 56,000 recreational visitors each year.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$37,000	\$22,000
Land Management and Development	\$59,000	\$27,000
Fish and Wildlife Management and Development	\$11,000	\$5,000
Facility Operations	\$857,000	\$916,000
Facility Maintenance and Rehabilitation	\$12,000	\$5,000
Enacted/Request	\$976,000	\$975,000
Non-Federal	\$56,000	\$15,000
Prior Year Funds	\$0	\$0
Total Program	\$1,032,000	\$990,000
Prior Year Funds/Non-Federal	(\$56,000)	(\$15,000)
Total Reclamation Allotment	\$976,000	\$975,000

WORK PROPOSED FOR FY 2020:

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. \$27,000

Non-Federal - City of Corpus Christi

(\$5,000)

Subtotal, Water and Energy Management and Development

\$22,000

Land Management and Development - Funds will be used to improve recreation facilities and to comply with health, safety, and accessibility requirements at the project. Funding for project prioritized to meet mission critical activities under Facility Operations and Facility Maintenance and Rehabilitation.

\$37,000

Non-Federal - Texas Parks and Wildlife

(\$10,000)

Subtotal, Land Management and Development

\$27,000

Fish and Wildlife Management and Development - Continues conservation measures and investigations associated with the ocelot and jaguarundi wildlife species near Choke Canyon Reservoir.

\$5,000

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 programs. Continues cultural resources site protection activities for resources associated with Choke Canyon Dam and Reservoir. \$916,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam. \$5,000

Reclamation Request \$975,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$39,000	\$39,000
Land Management and Development	\$137,000	\$126,000
Fish and Wildlife Management and Development	\$110,000	\$0
Facility Operations	\$115,000	\$115,000
Facility Maintenance and Rehabilitation	\$109,000	\$81,000
Enacted/Request	\$510,000	\$361,000
Non-Federal	\$0	\$0
Prior Year Funds	\$6,460	\$0
Total Program	\$516,460	\$361,000
Prior Year Funds/Non-Federal	(\$6,460)	\$0
Total Reclamation Allotment	\$510,000	\$361,000

WORK PROPOSED FOR FY 2020:

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 oversight and administration of contract repayment. \$39,000

Land Management and Development - Continues land resources management, to include asset inventory system database management, Geographic Information System activities, 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. \$126,000

Fish and Wildlife Management and Development - Concluded contract and collaboration with the Utah Division of Wildlife Resources in improving the understanding of how project operations and water management affect Bluehead Sucker in the project waterways. No additional needs or requirements are expected from the study. **\$0**

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. \$115,000

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.

\$81,000

Reclamation Request \$361,000

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 2018-2022:

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI land and waters

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$873,000	\$873,000
Enacted/Request	\$873,000	\$873,000
Prior Year Funds	998	0
Total Program	\$873,998	\$873,000
Prior Year Funds	(998)	0
Total Reclamation Allotment	\$873,000	\$873,000

WORK PROPOSED FOR FY 2020:

Facility Operations - Continues day-to-day management of recreation facilities and delivery of water for irrigation from Stony Gorge and East Park reservoirs. Oversee conservation camp programs for various clean-up projects at Stony Gorge and East Park Reservoirs. Continues the replacement of aging permanent toilet vaults to prevent contamination of the reservoirs. Continues implementation of the Orland Project Fire Management Plan for wildland fire suppression and prevention. Reclamation staff administer, plan, and facilitate pre-suppression activities. This includes entering into agreements with Federal, State and local agencies for pre-suppression fire activities on Reclamation lands located within

the Orland Project. Pre-suppression fire activities include the removal of excessive and hazardous vegetation fuel loads and the maintenance of shaded fuel breaks along wildland urban interface.

Reclamation Request \$873,000

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 currently prevents 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 Operations 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. The injection well is approaching the end of its useful life, and an EIS is underway to determine the preferred alternative for continued long term salinity control at Paradox Valley. Project benefits are realized by users of Colorado River water within and outside the Colorado River Basin.

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 Colorado River Storage Projects. However, current salinity measures in place control approximately \$382 million in quantified economic damages to municipal and agricultural water users along the Colorado River. This is a 62 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, authorized cost sharing in lieu of repayment for the salinity program, April 4, 1996, P.L. 110-246, Food, Conservation, and Energy Act of 2008, June 18, 2008, authorized up-front cost sharing.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$361,000	\$555,000
Land Management and Development	\$650,000	\$500,000
Fish and Wildlife Management and Development	\$491,000	\$25,000
Facility Operations	\$2,811,000	\$2,967,000
Request	\$4,313,000	\$4,047,000
Non-Federal	\$1,414,000	\$1,497,333
Prior Year Funds	\$349,404	\$0
Total Program	\$6,076,404	\$5,544,333
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	(\$1,763,404)	(\$1,497,333)
Total Reclamation Allotment	\$4,313,000	\$4,047,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues funding for essential area manager participation in the budget formulation for future construction plans, reviews current operating procedures for the injection well, and assures adherence to Reclamation-wide policy and Federal Regulations pertaining to the Salinity Control Act of 1974. Includes participation on the Colorado River Basin Salinity Control Forum and serves as a liaison between the Western Colorado Area Office and various State and Federal agencies. Increase is due to the initiation of designs on the preferred alternative based on the Environmental Impact Study (EIS) for the deep well injection system. \$888,333

Non-Federal (Upper and Lower Colorado River Basin Development Funds) (\$333,333)

Subtotal, Water and Energy Management and Development

\$555,000

Land Management and Development - Continues land management activities which consist of 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. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities.

\$666,667

Non-Federal (Upper and Lower Colorado River Basin Development Funds) (\$166,667)

Subtotal, Land Management and Development

\$500,000

Fish and Wildlife Management and Development – Completes the EIS and Record of Decision (ROD) for replacement alternatives of the deep well injection system. Continues ongoing environmental

Paradox Valley Unit

activities compliance. Less funding is requested due to substantial completion of the EIS and ROD expected in FY 2019. Anticipated release is summer of 2020. \$33,333

Non-Federal (Upper and Lower Colorado River Basin Development Funds) (\$8,333)

Subtotal, Fish and Wildlife Management and Development

\$25,000

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. \$3,956,000

Non-Federal (Upper and Lower Colorado River Basin Development Funds) (\$989,000)

Subtotal, Facility Operations

\$2,967,000

Reclamation Request

\$4,047,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Status of NEPA Compliance

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 1.625 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Measure: Percent of time that Bureau of Reclamation hydroelectric generating units are available to the interconnected Western electrical system during daily peak demand periods

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019	FY 2020
Request	Enacted \$0	President's Budget \$0
Non-Federal	\$15,631,000	\$17,704,000
Total Program	\$15,631,000	\$17,704,000
Non-Federal	(\$15,631,000)	(\$17,704,000)
Total Reclamation Allotment	\$0	\$0

WORK PROPOSED FOR FY 2020:

Facility Operations - Continues regular operations, including security costs for the hydroelectric power and water delivery facilities. \$14,149,000

Facility Maintenance and Rehabilitation - Continues transformer replacement at Davis Dam to reduce the potential of transformer damage or generator failure. Provides installation of generator heat exchangers at Parker and Davis Dams to reduce the potential of forced outages. The increase is for the Parker Dam Access Road and Arizona Guardrail project and for maintenance materials and supplies.

\$3,555,000

Non-Federal - Metropolitan Water District of Southern California and power customers

(\$17,704,000)

Reclamation Request

\$0

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. The project is operated by the Ainsworth Irrigation District.

AUTHORIZATION: The Ainsworth Unit was authorized as an integral part of the Missouri River Basin Project by Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and waters

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$40,000	\$33,000
Land Management and Development	\$85,000	\$23,000
Fish and Wildlife Management and Development	\$4,000	\$3,000
Facility Operations	\$126,000	\$93,000
Facility Maintenance and Rehabilitation	\$5,000	\$5,000
Enacted/Request	\$260,000	\$157,000
Non-Federal	\$25,000	\$23,000
Prior Year Funds	\$0	\$0
Total Program	\$285,000	\$180,000
Prior Year Funds/Non-Federal	(\$25,000)	(\$23,000)
Total Reclamation Allotment	\$260,000	\$157,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues to provide technical assistance in the evaluation of proposed water 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 Ainsworth Irrigation District. \$33,000

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. Less funding is requested because of prior year completion of the Merritt Community Shelter.

\$46,000

Non-Federal Participation - Nebraska Game and Parks

(\$23,000)

Subtotal, Land Management and Development

\$23,000

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 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. \$93,000

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.

\$5,000

Reclamation Request \$157,000

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 Almena Unit 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: Public Law 78-534, The Flood Control Act of 1944, December 22, 1944; and Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$15,000	\$13,000
Land Management and Development	25,000	25,000
Fish and Wildlife Management and Development	4,000	3,000
Facility Operations	476,000	433,000
Facility Maintenance and Rehabilitation	5,000	5,000
Enacted/Request	\$525,000	\$479,000
Non-Federal	25,000	25,000
Prior Year Funds	0	0
Total Program	\$550,000	\$504,000
Prior Year Funds/Non-Federal	(25,000)	(25,000)
Total Reclamation Allotment	\$525,000	\$479,000

WORK PROPOSED FOR FY 2020:

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. \$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. \$50,000

Non-Federal Participation - Kansas Department of 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. \$433,000

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. The funding varies depending on the type of required annual inspections at the dam.

\$5,000

Reclamation Request

\$479,000

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. The project is operated by the Angostura Irrigation District.

AUTHORIZATION: Public Law 398, Water Conservation and Utilization Act, August 11, 1939; reauthorized by Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Percent of baseline acres infested with invasive plant species that are under control

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$30,000	\$30,000
Land Management and Development	\$100,000	\$0
Facility Operations	\$667,000	\$645,000
Facility Maintenance and Rehabilitation	\$21,000	\$323,000
Enacted/Request	\$818,000	\$998,000
Non-Federal	\$100,000	\$0
Prior Year Funds	\$0	\$0
Total Program	\$918,000	\$998,000
Prior Year Funds/Non-Federal	(\$100,000)	\$0
Total Reclamation Allotment	\$818,000	\$998,000

WORK PROPOSED FOR FY 2020:

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. \$30,000

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.

\$645,000

Facility Maintenance and Rehabilitation - Continues the spillway rehabilitation project. 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. The funding varies depending on the type of required annual inspections at the dam. Increase in funding due to scheduled contract award for the spillway rehabilitation.

Reclamation Request \$998,000

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: Public Law 78-534, The Flood Control Act of 1944, December 22, 1944; and Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Percent of baseline acres infested with invasive plant species that are under control **Goal #2:** Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$10,000	\$4,000
Facility Operations	388,000	379,000
Facility Maintenance and Rehabilitation	5,000	5,000
Enacted/Request	\$403,000	\$388,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$403,000	\$388,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$403,000	\$388,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues administration and compliance of a repayment contract with the State of Colorado. \$4,000

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. \$379,000

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. The funding varies depending on the type of required annual inspections at the dam.

\$<u>5,000</u>

Reclamation Request \$388,000

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: The Reclamation Act of 1902, June 17, 1902 (authorized by the Secretary of the Interior on May 10, 1904), Public Law 98-157, Belle Fourche Irrigation Project, November 17, 1983; and Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and

Measure: Percent of baseline acres infested with invasive plant species that are under control

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$86,000	\$86,000
Land Management and Development	\$299,000	\$290,000
Facility Operations	\$1,111,000	\$815,000
Facility Maintenance and Rehabilitation	\$5,000	\$26,000
Enacted/Request	\$1,501,000	\$1,217,000
Non-Federal	\$125,000	\$140,000
Prior Year Funds	\$0	\$0
Total Program	\$1,626,000	\$1,357,000
Prior Year Funds/Non-Federal	(\$125,000)	(\$140,000)
Total Reclamation Allotment	\$1,501,000	\$1,217,000

WORK PROPOSED FOR FY 2020:

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. \$86,000

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.

\$390,000

Non-Federal Participation - South Dakota Game, Fish, and Parks

(\$100,000)

Subtotal, Land Management and Development

\$290,000

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. \$855,000

Non-Federal Participation – Belle Fourche Irrigation District

(\$40,000)

Subtotal, Facility Operations

\$815,000

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. The funding varies depending on the type of required annual inspections at the dam.

Increase due to greater O&M review requirements in FY 2020.

\$26,000

Reclamation Request

\$1,217,000

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: The Bostwick Unit (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 Unit 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$193,000	\$133,000
Land Management and Development	118,000	60,000
Fish and Wildlife Management and Development	20,000	18,000
Facility Operations	924,000	876,000
Facility Maintenance and Rehabilitation	11,000	11,000
Enacted/Request	\$1,266,000	\$1,098,000
Non-Federal	424,000	366,000
Prior Year Funds	0	0
Total Program	\$1,690,000	\$1,464,000
Prior Year Funds/Non-Federal	(424,000)	(366,000)
Total Reclamation Allotment	\$1,266,000	\$1,098,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues to provide technical assistance in the evaluation of proposed water 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 Bostwick Irrigation District in Nebraska, and Kansas-Bostwick Irrigation District in Kansas. Less funding is requested due to less contract compliance review requirements in FY 2020.

\$183,000

Non-Federal Participation - Bostwick Irrigation District (\$50,000)

Subtotal, Water and Energy Management and Development

\$133,000

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. Funding for project prioritized to meet mission critical activities under Facility Operations and Facility Maintenance and Rehabilitation. \$120,000

Non-Federal Participation - Kansas Department of Natural Resources (\$60,000)

Subtotal, Land Management and Development

\$60,000

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. **\$18,000**

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

\$1,132,000

Non-Federal Participation - Corps of Engineers

(\$256,000)

Subtotal, Facility Operations

\$876,000

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. The funding varies depending on the type of required annual inspections at the dam.

\$11,000

Reclamation Request

\$1,098,000

Boysen Unit Pick-Sloan Missouri Basin Program

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. On an average annual basis, the plant generates 58,500 megawatt hours of 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Percent of baseline acres infested with invasive plant species that are under control

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$29,000	\$29,000
Land Management and Development	\$162,000	\$125,000
Facility Operations	\$1,878,000	\$2,151,000
Facility Maintenance and Rehabilitation	\$15,000	\$105,000
Enacted/Request	\$2,084,000	\$2,410,000
Non-Federal	\$180,000	\$3,143,000
Prior Year Funds	\$0	\$0
Total Program	\$2,264,000	\$5,553,000
Prior Year Funds/Non-Federal	(\$180,000)	(\$3,143,000)
Total Reclamation Allotment	\$2,084,000	\$2,410,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues to provide support to project partners for the coordination management and implementation of water conservation plans; 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. \$29,000

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. \$250,000

Non-Federal Participation - State of Wyoming (\$125,000)

Subtotal, Land Management and Development

\$125,000

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.

\$2,169,000

Non-Federal Participation - Highland, Hanover, Upper Bluff, (\$18,000)

and Owl Creek Irrigation Districts

Subtotal, Facility Operations

\$2,151,000

Facility Maintenance and Rehabilitation – Continues 100 percent power customer funded projects listed below. 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 dependent upon the need for replacements, additions, and extraordinary maintenance requirements. The funding varies depending on the type of required annual inspections at the dam. Increase is due to greater O&M review requirements in FY 2020. \$3,105,000

Non-Federal Power Activities – Boysen powerplant rehabilitation (\$3,000,000)

Subtotal, Facility Maintenance and Rehabilitation

\$105,000

Reclamation Request \$2,410,000

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. It is one of the first high concrete dams built in the United States. The reservoir impounds approximately 646,565 acre-feet of water. The principle features include Shoshone Powerplant, Buffalo Bill Powerplant, Heart Mountain Energy Dissipater, Spirit Mountain Energy Dissipater, and the Diamond Creek, North Fork and South Fork Dikes.

The modification to the original structure included raising the dam 25 feet, increasing the existing capacity of the reservoir from 397,000 acre feet to 646,565 acre feet. Enlarging the capacity recaptured 59,600 acre feet of storage space loss due to sediment since closure of dam. The modification also provides additional water annually for irrigation, municipal, and industrial use, increased hydroelectric power generation, outdoor recreation, fish and wildlife conservation and development, environmental quality, and other incidental purposes. The enlargement also provided enlarging the spillway; construction of a visitor's center; dikes, impoundments; replacing and enlarging the existing Shoshone Powerplant; construction of the Buffalo Bill Powerplant and Spirit Mountain Energy Dissipater, providing a combined installed power generation capacity of 30,500 kilowatts.

AUTHORIZATION: Public Law 97-293, Buffalo Bill Dam and Reservoir Modifications, Title I, October 12, 1982; and Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measures: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$9,000	\$9,000
Land Management and Development	\$24,000	\$24,000
Facility Operations	\$2,733,000	\$3,444,000
Facility Maintenance and Rehabilitation	\$31,000	\$70,000
Enacted/Request	\$2,797,000	\$3,547,000
Non-Federal	\$24,000	\$24,000
Prior Year Funds	\$0	\$0
Total Program	\$2,821,000	\$3,571,000
Prior Year Funds/Non-Federal	(\$24,000)	(\$24,000)
Total Reclamation Allotment	\$2,797,000	\$3,547,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues negotiation and administration of water marketing, including administration of a contract with the State of Wyoming. \$9,000

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.

\$3,444,000

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 dependent upon the need for replacements, additions and extraordinary maintenance requirements. The funding varies depending on the type of required annual inspections at the dam. Increase is due to FY 2020 additional O&M review requirements.

\$70,000

Reclamation Request \$3,547,000

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. Project benefits consist of: power (generation consists of 50 megawatts of power), flood control, river regulation, and delivery of project water for irrigation and municipal and industrial 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility, Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measures: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget	
Water and Energy Management and Development	\$73,000	\$88,000	
Fish and Wildlife Management and Development	\$165,000	\$100,000	
Facility Operations	\$5,146,000	\$5,089,000	
Facility Maintenance and Rehabilitation	\$13,000	\$37,000	
Enacted/Request	\$5,397,000	\$5,314,000	
Non-Federal	\$40,000	\$15,006,000	
Prior Year Funds	\$0	\$0	
Total Program	\$5,437,000	\$20,320,000	
Prior Year Funds/Non-Federal	(\$40,000)	(\$15,006,000)	
Total Reclamation Allotment	\$5,397,000	\$5,314,000	

WORK PROPOSED FOR FY 2020:

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.

\$92.000

Non-Federal Participation - Helena Valley, Toston, and East

(\$4,000)

Bench Irrigation Districts, and City of Helena

Subtotal, Water and Energy Management and Development

\$88,000

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. **\$100,000**

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. Continues operation of recreation areas to meet minimum health and safety standards, and 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, and wildlife management, standing operating procedures, instrumentation, and emergency management. \$5,091,000

Non-Federal Participation - Helena Valley, Toston, and East Bench

(\$2,000)

Irrigation Districts and City of Helena

Subtotal, Facility Operations

\$5,089,000

Facility Maintenance and Rehabilitation – Continues upgrade of powerplant and dam electrical distribution system and 100 percent power customer funded items listed below. 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 dependent upon the need for replacements. The funding varies depending on the type of required annual inspections at the dam. Increase is due to additional O&M Facility review requirements in FY 2020.

\$15,037,000

Non-Federal Power Activities – Powerplant Rehabilitation.

(\$15,000,000)

Subtotal, Facility Maintenance and Rehabilitation

\$37,000

Reclamation Request

\$5,314,000

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. The unit 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 Public Law 78-534, The Flood Control Act of 1944, December 22, 1944; and reformulated under Title IX of Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$10,000	\$10,000
Land Management and Development	\$25,000	\$0
Fish and Wildlife Management and Development	\$4,000	\$3,000
Facility Operations	\$524,000	\$486,000
Facility Maintenance and Rehabilitation	\$11,000	\$11,000
Enacted/Request	\$574,000	\$510,000
Non-Federal	\$25,000	\$0
Prior Year Funds	\$0	\$0
Total Program	\$599,000	\$510,000
Prior Year Funds/Non-Federal	(\$25,000)	\$0
Total Reclamation Allotment	\$574,000	\$510,000

WORK PROPOSED FOR FY 2020:

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

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 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. \$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 dependent upon the need for replacements, additions and extraordinary maintenance requirements. The funding varies depending on the type of required annual inspections. **\$11,000**

Reclamation Request \$510,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

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

Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget	
Facility Operations	\$444,000	\$559,000	
Facility Maintenance and Rehabilitation	\$5,000	\$5,000	
Enacted/Request	\$449,000	\$564,000	
Non-Federal	\$15,000	\$15,000	
Prior Year Funds	\$0	\$0	
Total Program	\$464,000	\$579,000	
Prior Year Funds/Non-Federal	(\$15,000)	(\$15,000)	
Total Reclamation Allotment	\$449,000	\$564,000	

WORK PROPOSED FOR FY 2020:

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.

\$574,000 (\$15,000)

Non-Federal Participation - City of Dickinson Subtotal, Facility Operations

\$559,000

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. The funding varies depending on the type of required annual inspections at the dam.

\$5,000

Reclamation Request \$564,000

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, providing irrigation to approximately 49,000 irrigable acres of lands. The project is operated by the East Bench Irrigation District.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$26,000	\$148,000
Fish and Wildlife Management and Development	\$33,000	\$14,000
Facility Operations	\$661,000	\$641,000
Facility Maintenance and Rehabilitation	\$5,000	\$5,000
Enacted/Request	\$725,000	\$808,000
Non-Federal	\$190,000	\$88,000
Prior Year Funds	\$0	\$0
Total Program	\$915,000	\$896,000
Prior Year Funds/Non-Federal	(\$190,000)	(\$88,000)
Total Reclamation Allotment	\$725,000	\$808,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues water rights adjudication, efficiency incentive programs, and water quality monitoring on Clark Canyon Reservoir. Increase due to additional water quality monitoring required in FY 2020. \$191,000

Non-Federal Participation - East Bench Irrigation District, and (\$43,000)

Clark Canyon Water Supply Company

Subtotal, Water and Energy Management and Development

\$148,000

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. Less monitoring requirements are required in FY 2020. **\$14,000**

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. \$686,000

Non-Federal Participation - East Bench Irrigation District, and (\$45,000)

Clark Canyon Water Supply Company

Subtotal, Facility Operations

\$641,000

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. The funding varies depending on the type of required annual inspections at the dam.

\$5,000

Reclamation Request \$808,000

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, four main canals and one pump station. The four dams, reservoirs and irrigation systems provides storage to irrigate 66,090 acres of project lands. 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and waters

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$152,000	\$113,000
Land Management and Development	\$200,000	\$8,000
Fish and Wildlife Management and Development	\$20,000	\$18,000
Facility Operations	\$1,858,000	\$1,768,000
Facility Maintenance and Rehabilitation	\$106,000	\$20,000
Enacted/Request	\$2,336,000	\$1,927,000
Non-Federal	\$230,000	\$33,000
Prior Year Funds	\$0	\$0
Total Program	\$2,566,000	\$1,960,000
Prior Year Funds/Non-Federal	(\$230,000)	(\$33,000)
Total Reclamation Allotment	\$2,336,000	\$1,927,000

WORK PROPOSED FOR FY 2020:

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.

\$138,000

Subtotal, Water and Energy Management and Development

Non-Federal Participation - Frenchman-Cambridge Irrigation District

\$113,000

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. Funding for project prioritized to meet mission critical activities under Facility Operations and Facility Maintenance and Rehabilitation.

\$16,000

(\$25,000)

Non-Federal Participation – State of Nebraska, Local Partners

(\$8,000)

Subtotal, Land Management and Development

\$8,000

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. **\$18,000**

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. \$1,768,000

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. The funding varies depending on the type of required annual inspections at the dam. Less funding is requested due to reduced O&M review requirements at Enders, Medicine Creek, Trenton, and Red Willow facilities in FY 2020.

Reclamation Request \$1,927,000

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, and New Rockford 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 water 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, 2018, the Federal government has committed 79 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.

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 move forward with important investments in water resources infrastructure and the Department of the Interior stands ready to support that effort.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity Measure: Amount of acre feet of water conservation capacity enabled to help address drought

Measure: Percent of water infrastructure in good condition as measured by the Facility, Reliability Rating

(FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget	
Water and Energy Management and Development	\$37,229,000	\$7,666,000	
Facility Operations	\$12,268,000	\$12,194,000	
Facility Maintenance and Rehabilitation	\$16,000	\$5,000	
Enacted/Request	\$49,513,000	\$19,865,000	
Non-Federal	\$79,000	\$79,000	
Prior Year Funds	\$0	\$0	
Total Program	\$49,592,000	\$19,944,000	
Prior Year Funds/Non-Federal	(\$79,000)	(\$79,000)	
Total Reclamation Allotment	\$49,513,000	\$19,865,000	

Total Costs Information (Rural Water ONLY)*

	Total Estimated Cost	Total to 9/30/18	FY 2019	FY 2020	Balance to Complete
Reclamation	\$881,077,000	\$597,170,265	\$32,988,000	\$3,538,000	\$247,380,735
Non-Federal	136,257,000	136,257,000	\$0	\$0	\$0
Total	\$1,017,334,000	\$733,427,265	\$32,988,000	\$3,538,000	\$247,380,735

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

Total Costs Information (Non-Rural Water)*
----------------------------------	-----------------	----

	Total Estimated Cost	Total to 9/30/18	FY 2019 ^{1/}	FY 2020	Balance to Complete
Reclamation	\$1,001,316,000	\$512,989,409	\$4,241,000	\$4,128,000	\$479,957,591
Non-Federal ^{1/,2/,3/}	\$147,701,000	\$63,383,326	\$79,000	\$79,000	\$84,159,674
Total	\$1,149,017,000	\$576,372,735	\$4,320,000	\$4,207,000	\$564,117,265

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

Cost Allocation and Methodology

Allocation	FY 2019	FY 2020
Municipal and Industrial	\$1,008,563,000	\$1,017,334,000
Non-Municipal and Industrial	\$1,159,827,000	\$1,149,017,000
Total	\$2,168,390,000	\$2,166,351,000

METHODOLOGY: The methodology of the cost allocation has not been modified from last year.

APPROPRIATION CEILING: Federal appropriations authorized are \$1,590,974,381 (October 2019). 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 \$1,882,393,000, which is equal to the comparable Federal obligation.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development -

<u>Rural Water Component</u> – Activity under this component historically consists of oversight of preconstruction and construction activities on approved State MR&I. This program is managed and prioritized by the State of North Dakota.

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. Funds include costs for Tribal contracts, Reclamation oversight and technical assistance, and a limited amount of construction. \$3,538,000

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.

¹/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.

Non-Rural Water Components - Contributes funds to the Natural Resources Trust Fund (5 percent of State M&I and Red River).

Performs necessary investigations and contract actions to assist in the development of irrigation in the Turtle Lake and McClusky Canal-side irrigation areas. \$32,000

Continues minimum maintenance to assure compliance with Federal and State laws, site security, and public safety reliability of completed facilities still in construction status. Work includes routine, ongoing maintenance of the New Rockford Canal, a portion of the McClusky canal, and the McClusky canal slide repair to address a construction deficiency that prevents reliable water delivery capabilities.

\$3,967,600

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. \$208,000

Non-Federal Participation – Garrison Diversion Conservancy District (\$79,000) \$129,000

Subtotal, Water and Energy Management and Development

\$7,666,000

Facility Operations -

Rural Water Component - 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 Environmental Protection Agency regulations. Continues water treatment and distribution, water quality monitoring, required record keeping, public safety, and National Environmental Policy Act and cultural resource compliance. Funds include costs for tribal contracts and Reclamation oversight and technical assistance.

\$6.610.000

Non-Rural Water Component - Continues operation of Jamestown Dam for flood control operations and continued delivery of project water to downstream users. \$619,000

Continues to provide the required operation and maintenance on the following features of Garrison: Snake Creek Pumping Plant, the McClusky Canal, Oakes Test Area, Audubon, Arrowwood, Kraft Slough Lonetree, and Scattered Tracts. Also continues supply system water deliveries under contract and maintains freshening flows.

\$4,965,000\$

Subtotal, Facility Operations

\$12,194,000

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 dependent upon the need for replacements, additions, and extraordinary maintenance requirements. The funding varies depending on the type of required annual inspections at the dam.

Reclamation Request \$19,865,000

Glen Elder Unit Pick-Sloan Missouri Basin Program

LOCATION: The Glen Elder Unit of the Solomon Division is located in the Solomon River Valley, in Mitchell, Osborne, Cloud and Ottawa Counties of north-central Kansas.

DESCRIPTION/JUSTIFICATION: The Glen Elder Unit 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: Public Law 78-534, The Flood Control Act of 1944, December 22, 1944; and Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and waters

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$20,000	\$19,000
Land Management and Development	\$45,000	\$79,000
Fish and Wildlife Management and Development	\$6,000	\$6,000
Facility Operations	\$1,057,000	\$1,142,000
Facility Maintenance and Rehabilitation	\$2,345,000	\$5,000
Enacted/Request	\$3,473,000	\$1,251,000
Non-Federal	\$45,000	\$79,000
Prior Year Funds	\$0	\$0
Total Program	\$3,518,000	\$1,330,000
Prior Year Funds/Non-Federal	(\$45,000)	(\$79,000)
Total Reclamation Allotment	\$3,473,000	\$1,251,000

WORK PROPOSED FOR FY 2020:

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. \$19,000

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 due to needs of project and managing partner to meet standards noted above.

\$158,000

Non-Federal Participation - Kansas Department of Wildlife

(\$79,000)

Subtotal, Land Management and Development

\$79,000

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.

\$1,142,000

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. The funding varies depending on the type of required annual inspections at the dam. Less funding is requested due to the scheduled contract award for the outlet works recoating in FY 2019.

\$5,000

Reclamation Request

\$1,251,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

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

(FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$10,000	\$10,000
Land Management and Development	\$72,000	\$0
Facility Operations	\$959,000	\$961,000
Facility Maintenance and Rehabilitation	\$367,000	\$8,000
Enacted/Request	\$1,408,000	\$979,000
Non-Federal	\$72,000	\$0
Prior Year Funds	\$0	\$0
Total Program	\$1,480,000	\$979,000
Prior Year Funds/Non-Federal	(\$72,000)	\$0
Total Reclamation Allotment	\$1,408,000	\$979,000

WORK PROPOSED FOR FY 2020:

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

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. Facility Operations funding is adjusted within the projects to meet the scheduled O&M needs for FY 2020. **\$961,000**

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. The funding varies depending on the type of required annual inspections at the dam. Less funding is requested due to the scheduled contract award of the stilling basin concrete repair in FY 2019.

Reclamation Request \$979,000

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. Project is a multipurpose project providing irrigation, municipal and industrial water, and recreation benefits.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$5,000	\$52,000
Facility Operations	\$154,000	\$209,000
Facility Maintenance and Rehabilitation	\$12,000	\$29,000
Enacted/Request	\$171,000	\$290,000
Non-Federal	\$5,000	\$23,000
Prior Year Funds	\$0	\$0
Total Program	\$176,000	\$313,000
Prior Year Funds/Non-Federal	(\$5,000)	(\$23,000)
Total Reclamation Allotment	\$171,000	\$290,000

WORK PROPOSED FOR FY 2020:

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. Increase in funding is due to emphasis on water rights adjudication issues and water quality monitoring. \$52,000

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 of the standing operating procedures, implementation and coordination of emergency management and public safety programs. \$232,000

Non-Federal Participation - Helena Valley Irrigation District (\$23,000)

Subtotal, Facility Operations

\$209,000

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 dependent upon the need for replacements, additions and extraordinary maintenance requirements. The funding varies depending on the type of required annual inspections at the dam. Increase is due to additional O&M review requirements in FY 2020. **\$29,000**

Reclamation Request \$290,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) (high-and significant hazard dams)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$102,000	\$100,000
Enacted/Request	\$102,000	\$100,000
Non-Federal	0	0
Prior Year Funds	0	0
Total Program	\$102,000	\$100,000
Prior Year Funds/Non-Federal	0	0
Total Reclamation Allotment	\$102,000	\$100,000

WORK PROPOSED FOR FY 2020:

Facility Operations - Continues day to day operations of the Kansas River Area dams including Bostwick Unit, Frenchman-Cambridge Unit, 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.

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, 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: Public Law 78-534, The Flood Control Act of 1944, December 22, 1944; Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Percent of baseline acres infested with invasive plant species that are under control

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Land Management and Development	\$198,000	\$0
Facility Operations	\$605,000	562,000
Facility Maintenance and Rehabilitation	\$115,000	\$5,000
Enacted/Request	\$918,000	\$567,000
Non-Federal	\$198,000	\$0
Prior Year Funds	\$0	\$0
Total Program	\$1,116,000	\$567,000
Prior Year Funds/Non-Federal	(\$198,000)	\$0
Total Reclamation Allotment	\$918,000	\$567,000

WORK PROPOSED FOR FY 2020:

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. \$562,000

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. The funding varies depending on the type of required annual inspections at the dam. Less funding is requested due to the scheduled contract award of the boundary fence replacement in FY 2019.

\$5,000

Reclamation Request

\$567,000

Kirwin Unit Pick-Sloan Missouri Basin Program

LOCATION: The Kirwin Unit is located in Phillips, Smith, and Osborne Counties of northeastern Kansas, along the North Fork of the Solomon River.

DESCRIPTION/JUSTIFICATION: The Kirwin 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: Public Law 78-534, The Flood Control Act of 1944, December 22, 1944; and Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$14,000	\$11,000
Fish and Wildlife Management and Development	\$3,000	\$3,000
Facility Operations	\$441,000	\$366,000
Facility Maintenance and Rehabilitation	\$5,000	\$5,000
Enacted/Request	\$463,000	\$385,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$463,000	\$385,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$463,000	\$385,000

WORK PROPOSED FOR FY 2020:

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. \$11,000

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. \$3,000

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. \$366,000

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.

\$5,000

Reclamation Request \$385,000

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, 5,600 acre-feet of irrigation and municipal and industrial water supply, 70,000 recreation visitations per year, 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and waters

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$28,000	\$43,000
Land Management and Development	\$6,000	\$6,000
Fish and Wildlife Management and Development	\$57,000	\$37,000
Facility Operations	\$1,498,000	\$1,501,000
Facility Maintenance and Rehabilitation	\$10,000	\$685,000
Enacted/Request	\$1,599,000	\$2,272,000
Non-Federal	\$6,000	\$34,000
Prior Year Funds	\$0	\$0
Total Program	\$1,605,000	\$2,306,000
Prior Year Funds/Non-Federal	(\$6,000)	(\$34,000)
Total Reclamation Allotment	\$1,599,000	\$2,272,000

WORK PROPOSED FOR FY2020:

Water and Energy Management and Development - Continues water quality monitoring of inflows and lake waters. Continues issuance and administration of water service contracts. Increase due to additional monitoring scheduled in FY 2020. \$43,000

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. \$6,000

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. \$37,000

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 as-built drawings.

\$1.535.000

Non-Federal Participation - Helena Valley Irrigation District

(\$34,000)

Subtotal, Facility Operations

\$1,501,000

Facility Maintenance and Rehabilitation -Includes funding for Dam auxiliary outlet works metalwork project. 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. The funding varies depending on the type of required annual inspections at the dam. Increase is due to scheduled construction contract award for the metalwork project.

Reclamation Request \$2,272,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$1,047,000	\$1,030,000
Facility Operations	\$117,000	\$110,000
Enacted/Request	\$1,164,000	\$1,140,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$1,164,000	\$1,140,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$1,164,000	\$1,140,000

WORK PROPOSED FOR FY 2020:

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. Managerial training will

include an emphasis on the importance of quantifying project benefits as a business practice necessary to be fiscally responsible and accountable to the taxpayers. \$1,030,000

Facility Operations - Continues Reclamation's payments of wheeling costs associated with the Pick-Sloan Project use pumping power and 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.

Reclamation Request \$1,140,000

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 in 1973 by Reclamation for construction of the Narrows Unit. The land is currently managed for agricultural leasing purposes generating approximately \$26,000 per year in revenues, which are deposited into the Reclamation fund.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$38,000	\$30,000
Enacted/Request	\$38,000	\$30,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$38,000	\$30,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$38,000	\$30,000

WORK PROPOSED FOR FY 2020:

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.

Reclamation Request \$30,000

North Loup Unit Pick-Sloan Missouri Basin Program

LOCATION: The North Loup 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 Virginia Smith Dam and Calamus 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 project provides over 10,000 acre-feet of water to 26,643 acres of irrigated. Authorized, but not completed project features would provide for direct surface water service to 55,116 acres of land. In addition to irrigation, the unit provides for an estimated 57,000 annual recreation visits and fish and wildlife benefits. Project is operated by the Twin Loups Irrigation District and Twin Loups Reclamation District.

AUTHORIZATION: Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity Measure: Amount of acre feet of water conservation capacity enabled to help address drought

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and water

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$54,000	\$52,000
Land Management and Development	\$30,000	\$30,000
Fish and Wildlife Management and Development	\$9,000	\$8,000
Facility Operations	\$108,000	\$106,000
Facility Maintenance and Rehabilitation	\$32,000	\$53,000
Enacted/Request	\$233,000	\$249,000
Non-Federal	\$30,000	\$30,000
Prior Year Funds	\$0	\$0
Total Program	\$263,000	\$279,000
Prior Year Funds/Non-Federal	(\$30,000)	(\$30,000)
Total Reclamation Allotment	\$233,000	\$249,000

WORK PROPOSED FOR FY 2020:

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.

\$52,000

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

\$00,000

Non-Federal Participation - Nebraska Game and Parks Commission and Lower Loup Natural Resources District.

<u>(\$30,000)</u>

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. **\$8,000**

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 dependent upon the need for replacements, additions and extraordinary maintenance

requirements. The funding varies depending on the type of required annual inspections at the dam. Increase due to greater O&M review requirements in FY 2020. \$53,000

Reclamation Request \$249,000

North Platte Area Pick-Sloan Missouri Basin Program

LOCATION: The North Platte Area consists of two units: The Glendo Unit which is located in Natrona, Converse, and Platte Counties on the North Platte River in eastern and central Wyoming; and the Kortes Unit which 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 Program, consisting of Kortes Dam, Reservoir, and Powerplant, is in central Wyoming in a narrow gorge of the North Platte River, two miles below Seminoe Dam in the Kendrick Project, and about 60 miles southwest of Casper, Wyoming. It was the first unit initiated by Reclamation under the Missouri River Basin Program. The 36,000 kilowatt powerplant generates an average of over 160 million kilowatt-hours annually.

AUTHORIZATION: Public Law 78-534; The Flood Control Act of 1944 December 22, 1944; Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazards dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$48,000	\$47,000
Fish and Wildlife Management and Development	\$24,000	\$25,000
Facility Operations	\$5,340,000	\$5,475,000
Facility Maintenance and Rehabilitation	\$97,000	\$51,000
Enacted/Request	\$5,509,000	\$5,598,000
Non-Federal	\$12,000	\$12,000
Prior Year Funds	\$0	\$0
Total Program	\$5,521,000	\$5,610,000
Prior Year Funds/Non-Federal	(\$12,000)	(\$12,000)
Total Reclamation Allotment	\$5,509,000	\$5,598,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues water conservation field services and negotiations and administration of water marketing for eleven Glendo water contracts. \$47,000

Fish and Wildlife Management and Development - Participates in the preparation of National Environmental Policy Act document information, Endangered Species Act (ESA) Biological Assessment information, and Fish and Wildlife Coordination Act Report information for North Platte River Projects and as a Cooperating Agency as invited on other agency's development of environmental documents to comply with ESA and other laws. 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. **\$25,000**

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. 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.

\$5,487,000
Non-Federal Participation - Water Users (Glendo Contractors, PacifiCorp)

(\$12,000)

Subtotal, Facility Operations

\$5,475,000

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. The funding varies depending on the type of required annual inspections at the dam. \$51,000

Reclamation Request \$5,598,000

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. The project currently serves M&I and livestock water to 106 towns and bulk customers spread across an area the size of Connecticut. Average yearly recreational attendance at the James Diversion Reservoir is estimated to be slightly more than 5,000 visitors.

AUTHORIZATION: Public Law 78-534, The Flood Control Act of 1944, December 22, 1944, as supplemented and extended by Public Law 79-526, The Flood Control Act of 1946, July 24, 1946; Public Law 88-442; Increased Authorization, Missouri River Basin Project, August 14, 1964; and Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$37,000	\$0
Facility Operations	\$73,000	\$110,000
Enacted/Request	\$110,000	\$110,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$110,000	\$110,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$110,000	\$110,000

WORK PROPOSED FOR FY 2020:

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.

Reclamation Request \$110,000

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 multi-purpose benefits, including irrigation, fish and wildlife and recreation opportunities. Project is operated by the Owl Creek Irrigation District.

AUTHORIZATION: Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility, Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$6,000	\$4,000
Facility Operations	\$91,000	\$60,000
Facility Maintenance and Rehabilitation	\$8,000	\$11,000
Enacted/Request	\$105,000	\$75,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$105,000	\$75,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$105,000	\$75,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues negotiation and administration of water marketing activities. \$4,000

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.

\$60,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam. Increase due to greater O&M review requirements in FY 2020.

\$11,000

Reclamation Request \$75,000

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: Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility, Reliability

Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$195,000	\$194,000
Facility Maintenance and Rehabilitation	\$13,000	\$5,000
Enacted/Request	\$208,000	\$199,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$208,000	\$199,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$208,000	\$199,000

WORK PROPOSED FOR FY 2020:

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. \$194,000

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. The funding varies depending on the type of required annual inspections at the dam. Less funding is requested due to reduced O&M review requirements in FY 2020.

Reclamation Request \$199,000

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 multi-purpose 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, Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Amount of acre feet of water conservation capacity enabled to help address drought

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

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

Rating

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$8,000	\$8,000
Facility Operations	\$570,000	\$580,000
Facility Maintenance and Rehabilitation	\$10,000	\$24,000
Enacted/Request	\$588,000	\$612,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$588,000	\$612,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$588,000	\$612,000

WORK PROPOSED FOR FY 2020:

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. \$8,000

Facility Operations - Continues with minimal maintenance activities at Pilot Butte Powerplant for security and environment protection 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.

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam. Increase due to additional O&M facility review requirements in FY 2020.

\$24,000

Reclamation Request \$612,000

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 approximately 12 miles south of Lemmon, South Dakota. Facility operation provides for the continued ongoing operation of Shadehill Dam for 217,708 acre-feet of flood control storage, irrigation of 2,420 acres, fish and wildlife conservation, 127,000 annual recreational visitors, and silt detention.

AUTHORIZATION: Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and waters

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Land Management and Development	\$153,000	\$1,000
Facility Operations	\$461,000	\$461,000
Facility Maintenance and Rehabilitation	\$5,000	\$40,000
Enacted/Request	\$619,000	\$502,000
Non-Federal	\$153,000	\$0
Prior Year Funds	\$0	\$0
Total Program	\$772,000	\$502,000
Prior Year Funds/Non-Federal	(\$153,000)	\$0
Total Reclamation Allotment	\$619,000	\$502,000

WORK PROPOSED FOR FY 2020:

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. Funding for project prioritized to meet mission critical activities under Facility Operation and Facility Maintenance and Rehabilitation. \$1,000

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. \$461,000

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. The funding varies depending on the type of required annual inspections at the dam. Increase due to greater O&M review requirements in FY 2020. \$40,000

Reclamation Request \$502,000

Webster Unit Pick-Sloan Missouri Basin Program

LOCATION: The Webster Unit is located in Rooks and Osborne Counties of north-central Kansas between Woodstone and Osborne, on the north side of the South Fork of the Solomon River.

DESCRIPTION/JUSTIFICATION: Webster Dam 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: Public Law 78-534, The Flood Control Act of 1944, December 22, 1944; and Public Law 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$12,000	\$8,000
Fish and Wildlife Management and Development	\$4,000	\$3,000
Facility Operations	\$476,000	\$452,000
Facility Maintenance and Rehabilitation	\$5,000	\$17,005,000
Enacted/Request	\$497,000	\$17,468,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$497,000	\$17,468,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$497,000	\$17,468,000

WORK PROPOSED FOR FY 2020:

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. \$8,000

Fish and Wildlife Management and Development - Provides for coordination with the Kansas Department of Wildlife, Parks, and Tourism 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. \$452,000

Facility Maintenance and Rehabilitation – Continues replacement of the spillway chute to address significant deterioration due to poor quality limestone aggregate. 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. The funding also varies depending on the type of required annual inspections at the dam. Increase in funding is for scheduled award of the construction contract for the Webster Dam spillway concrete replacement in FY 2020.

Reclamation Request \$17,468,000

Yellowtail Unit Pick-Sloan Missouri Basin Program

LOCATION: The Yellowtail Unit 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, the only unit of the Lower Bighorn Division, 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 Powerplant is currently undergoing a major upgrade which will increase the generating capacity to 300 megawatts. 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Percent of baseline acres infested with invasive plant species that are under control

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$7,000	\$85,000
Fish and Wildlife Management and Development	\$15,000	\$20,000
Facility Operations	\$6,262,000	\$6,213,000
Facility Maintenance and Rehabilitation	\$2,677,000	\$2,282,000
Enacted/Request	\$8,961,000	\$8,600,000
Non-Federal	\$2,324,000	\$0
Prior Year Funds	\$0	\$0
Total Program	\$11,285,000	\$8,600,000
Prior Year Funds/Non-Federal	(\$2,324,000)	\$0
Total Reclamation Allotment	\$8,961,000	\$8,600,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues coordination of activities associated with the Crow Tribe's right to develop hydropower at the Yellowtail Afterbay. Increase due to additional activities related to hydropower planned in FY 2020. \$85,000

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. \$20.000

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, collection of instrumentation data, updating the standing operating procedures and emergency management. **\$6,213,000**

Facility Maintenance and Rehabilitation – Includes funding for rock scaling and removal, ice barrier addition; rockfall protections system addition; dam foundation drain cleaning; design work for 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 dependent upon the need for replacements, additions, and extraordinary maintenance requirements. The funding varies depending on the type of required annual inspections at the dam.

Reclamation Request \$8,600,000

Pine River Project

LOCATION: This project is located in the 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 it 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$52,000	\$20,000
Land Management and Development	\$27,000	\$100,000
Facility Operations	\$155,000	\$157,000
Facility Maintenance and Rehabilitation	\$233,000	\$138,000
Request	\$467,000	\$415,000
Non-Federal	\$0	\$0
Prior Year Funds	\$260,701	\$0
Total Program	\$727,701	\$415,000
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	(\$260,701)	\$0
Total Reclamation Allotment	\$467,000	\$415,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues lifecycle requirements for review and administration of project repayment contracts to ensure compliance and water quality activities. Less funding is requested due to realignment of project priorities and project coordination programs. \$20,000

Land Management and Development - Continues land management activities which consist of complying with and administering laws and regulations, execution of agreements, contracts, and grants or

other agreements for the use and management of lands and the protection of recreation facilities and land resources. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities and agreement requests. Increase is due to realignment of project priorities and project coordination programs. \$100,000

Facility Operations - Begins program development and coordination of regional database and oversight of the Geographical Information System. 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.

\$157,000

Facility Maintenance and Rehabilitation - Continues final design, specifications, value engineering study, and Independent Government Cost Estimates to repair the left spillway wall at Vallecito Dam. Continues inventories, inspections, and maintenance of Type 1 bridges, reviews of operation and maintenance, Safety of Dams follow-up, and examination of existing structures to ensure public safety through the identification of operation and maintenance deficiencies and dam safety concerns. \$138,000

Reclamation Request \$415,000

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. 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$12,000	\$12,000
Land Management and Development	\$2,000	\$2,000
Facility Maintenance and Rehabilitation	\$33,000	\$47,000
Enacted/Request	\$47,000	\$61,000
Non-Federal	\$0	\$0
Prior Year Funds	\$5,870	\$0
Total Program	\$52,870	\$61,000
Prior Year Funds/Non-Federal	(\$5,870)	\$0
Total Reclamation Allotment	\$47,000	\$61,000

WORK PROPOSED FOR FY 2020:

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 oversight and administration of contract repayment. Continues water management activities with the project.

\$12,000

Land Management and Development - Continues administration and compliance activities, to include grants and agreement processing, associated with the management and development of project lands.

\$2,000

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. Increase is due to the enhanced coordination between local water users and Reclamation personnel.

\$47,000

Reclamation Request

\$61,000

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.

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 2018-2022:

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measures: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$354,000	\$459,000
Land Management and Development	\$369,000	\$435,000
Fish and Wildlife Management and Development	\$468,000	\$568,000
Facility Operations	\$455,000	\$866,000
Facility Maintenance and Rehabilitation	\$57,000	\$40,000
Enacted/Request	\$1,703,000	\$2,368,000
Non-Federal	\$1,429,000	\$870,000
Prior Year Funds	\$31,079	\$0
Total Program	\$3,163,079	\$3,238,000
Prior Year Funds/Non-Federal	(\$1,460,079)	(\$870,000)
Total Reclamation Allotment	\$1,703,000	\$2,368,000

WORK PROPOSED FOR FY 2020:

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. \$459,000

Land Management and Development - Continues land resources management, to include asset inventory system database management, Geographic Information System activities, 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, grant 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.

\$435,000

Fish and Wildlife Management and Development - Begins work to prevent the spread of Quagga Mussels and other aquatic invasive species in the system. As a new and emerging threat to Reclamation facilities administered by the Provo Area Office, these funds will be used to reduce risk of infestation. Continues tasks required by the reasonable and prudent alternative of the Biological Opinion for the operation of the Provo River Project. Continues an interagency agreement with multiple cost-share partners prescribed by the June Sucker Recovery Implementation Program. \$1,438,000

partiers preserioed by the suite Sucker Recovery Implementation Frogram.	Ψ1,430,000
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)	<u>(\$10,000)</u>

Subtotal, Fish and Wildlife Management and Development

\$568,000

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. The increase in funding is for Reclamation's share of the replacement costs of two tube values in the power plant. \$866,000

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. **\$40,000**

Reclamation Request \$2,368,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$66,000	\$66,000
Facility Maintenance and Rehabilitation	\$13,000	\$5,000
Enacted/Request	\$79,000	\$71,000
Non-Federal	\$26,000	\$23,000
Prior Year Funds	\$0	\$0
Total Program	\$105,000	\$94,000
Prior Year Funds/Non-Federal	(\$26,000)	(\$23,000)
Total Reclamation Allotment	\$79,000	\$71,000

WORK PROPOSED FOR FY 2020:

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. \$89,000 Non-Federal - City of Rapid City (\$23,000)

Subtotal, Facility Operations

\$66,000

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. The funding varies depending on the type of required annual inspections at the dam. Less funding is requested due to reduced O&M review requirements in FY 2020. \$5,000

Reclamation Request \$71,000

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, annual irrigation water releases up to 790,000 acre-feet for approximately 155,000 acres in New Mexico and Texas, and 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 by maintaining a generating capacity of 27,950 kilowatts that result in an annual generation of 87 million kilowatt-hours, which is then transmitted by through the Western Area Power Administration. 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.

Reclamation contracts for operation, maintenance and management tasks for Reclamation's recreation facilities and lands at Elephant Butte and Caballo Dams, as well as Percha and Leasburg Diversion Dams with New Mexico State Parks. It is estimated that these facilities are host to over 1.5 million recreational visits each year. Reclamation reimburses up to 50 percent of the capital improvements in accordance with the specific terms in the state-wide agreement with New Mexico State Parks. Elephant Butte and Caballo Dams and Reservoirs are operated by Reclamation 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 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Number of Threatened or Endangered species recovery activities implemented

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
W. 15 1		
Water and Energy Management and Development	\$404,000	\$245,000
Land Management and Development	\$653,000	\$1,328,000
Fish and Wildlife Management and Development	\$803,000	\$580,000
Facility Operations	\$5,438,000	\$4,491,000
Facility Maintenance and Rehabilitation	\$672,000	\$7,177,000
Request	\$7,970,000	\$13,821,000
Non-Federal	\$491,000	\$493,000
Prior Year Funds	\$69,101	\$0
Total Program	\$8,530,101	\$14,314,000
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	(\$560,101)	(\$493,000)
Total Reclamation Allotment	\$7,970,000	\$13,821,000

WORK PROPOSED FOR FY 2020:

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. The United States intervened and is officially part of this litigation and the United States seeks declaratory and injunctive relief from New Mexico's interference with the operation of the Project. The United States and Texas contend that the unlawful depletion of surface water and groundwater in New Mexico below Elephant Butte affects deliveries to Project beneficiaries and that the United States may have to release additional water from storage to offset the anticipated depletions, reducing the water available in storage for future deliveries. These tasks are required to protect Federal investments and ensure that the project is operated in accordance with State and Federal laws.

\$245,000

Land Management and Development - Continues 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. Increase is due to a focused effort on title and appraisal services and complete digitization and input of current project data into a Geographic Information System database. These projects will help resolve issues of surface ownership, asset inventories, project boundaries, and identification of potentially affected parties when performing work, or permitting surface use on or near Reclamation-owned and withdrawn lands. In addition, it will allow Reclamation to secure authoritative ownership documents for use in disposals and relinquishments, and for accurate descriptions of park boundaries, concessions areas and rights-of-way.

\$1,328,000

Fish and Wildlife Management and Development - Begins early detection and/or monitoring and prevention of Quagga Mussel infestation. Continues implementation of the Biological Opinion on the Operating Agreement for the Rio Grande Project and storage of San Juan Chama Project water in Elephant Butte. Continues mitigation for the Southwestern Willow Flycatcher set forth as a result of the possible impact on endangered species. Continues Southwestern Willow Flycatcher, Yellow-Billed Cuckoo surveys, habitat studies, and environmental clearances for grazing, vegetation management, and licensing activities on project lands to meet Endangered Species Act requirements. **\$580,000**

Facility Operations - 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, and minimum oversight of operations coordination between Reclamation, the irrigation districts, and Mexico. Continues recreation facility plans for Elephant Butte, Caballo, Percha, and Leasburg State Parks to repair aging facilities and perform capital improvements. Under agreement with State Parks, Reclamation pays up to 50 percent of recreation O&M.

	\$4,984,000
Non-Federal (Elephant Butte Irrigation District)	(\$273,000)
Non-Federal (El Paso County Water Improvement District #1)	(\$220,000)

Subtotal, Facility Operations

\$4,491,000

Facility Maintenance and Rehabilitation - Completes replacement of the power plant 115 KV oil circuit breakers which are over 30 years old reaching the end of their life expectancy becoming less reliable and less cost efficient. 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. Begins the 115kv insulator replacements which are at the end of their life expectancy and can become more sensitive to environmental conditions as well as a reduced ability to withstand the stress to which they are subjected. In addition, begins the penstock recoating of all six of the power plant penstocks which has been a category 2 power plant O&M recommendation since 2007. Increase is due to the start of unit rewinds at the Elephant Butte Power Plant and the scheduled replacement of the original (over 70 years old) 115kv insulators reducing the risk of the original insulator failure and inability to provide power to the grid and other replacement equipment (including distribution panel upgrades, and construction equipment) for the continued operation and maintenance of the power plant and Elephant Butte and Caballo Dams.

§7,177,000

Reclamation Request \$13,821,000

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 approved study. The study is complete; the Report to Congress will be submitted in FY 2019.

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). Current authorization expires in FY 2019; proposed changes in appropriations language offered in Reclamation's FY 2020 Budget Justification would extend authorization through FY 2025.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$3,750,000	\$68,000
Request	\$3,750,000	\$68,000
Non-Federal ^{1/}	\$0	\$0
Prior Year Funds	\$82,348	\$0
Total Program	\$3,832,348	\$68,000
Prior Year Funds/Non-Federal	(\$82,348)	\$0
Total Reclamation Allotment	\$3,750,000	\$68,000

There is no cost share requirement for the study.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development – Less funding is required because of the prior year completion of river maintenance projects (dredging and ditch lining, rehabilitation and reconstruction) and water conservation efforts. Continues the deauthorization of the Rio Grande Pueblos Project. \$68,000

Reclamation Request \$68,000

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), and extensive off-reservation trust lands. It is the smallest reservation in Montana and was created in 1916. Its largest community is Box Elder. 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 Boy's Reservation, while non-core pipelines will serve 21 surrounding towns and rural water districts. At full build-out, the system will be designed to serve a total projected 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 initially be funded by a \$20 million trust fund established with Bureau of Indian Affairs appropriations and will eventually transition entirely to be funded by water users and Chippewa Cree Tribe funds. The non-Tribal systems will fund their operation, maintenance, and replacement costs separately, without Federal assistance.

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, 2018, Rocky Boy's/North Central Rural Water System was approximately 33 percent complete, as financially determined. The Federal Government has committed 31 percent of its maximum cost-share towards completing the project; the non-Federal sponsor has committed 51 percent of its minimum cost-share.

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 move forward with important investments in water resources infrastructure and the Department of the Interior stands ready to support that effort.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$30,000,000	\$1,984,000
Enacted/Request	\$30,000,000	\$1,984,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$30,000,000	\$1,984,000
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$30,000,000	\$1,984,000

Total Cost Information*

	Total Estimated Cost	Total to 9/30/18	FY 2019 ^{1/}	FY 2020	Balance to Complete
Reclamation	\$349,670,000	\$100,288,796	\$30,000,000	\$1,984,000	\$217,397,204
Non-Federal	\$46,839,000	\$23,002,887	\$0	\$0	\$23,836,113
Total	\$396,509,000	\$123,291,683	\$30,000,000	\$1,984,000	\$241,233,317

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

Cost Allocation and Methodology

Allocation	FY 2019	FY 2020
Municipal and Industrial	\$388,689,000	\$396,509,000
Total	\$388,689,000	\$396,509,000

METHODOLOGY: The methodology of the cost allocation has not been modified from last year.

APPROPRIATION CEILING: P.L. 107-331 authorized the appropriation of \$229,000,000 (2002 price level). At October 2019 price levels, the indexed portion of the Federal ceiling is \$349,670,000; the indexed portion of the non-Federal ceiling is \$46,839,000; with a total indexed ceiling of \$396,509,000. This authorization is not adequate to cover the project as currently proposed.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Funds will be used for program administration and contract oversight by Reclamation and the Tribe. "Continue construction on the rural water project with the main focus on the design and construction of the water treatment plant on the Rocky Boy's reservation.

Reclamation Request \$1,984,000

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 the Talent Irrigation Districts (TID). An extensive collection of diversion, storage, and conveyance systems were constructed to carry water from the Rogue River and Klamath River basins to irrigated lands in the Medford area. Considerable rehabilitation of existing features is also included in the Project authorizations. Under contract with the United States, 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 activities consist of Reclamation's efforts to provide continued flood control forecasting, water conservation, 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 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. 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; Order 13007, Indian Sacred Sites, May 24, 1996; 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$199,000	\$182,000
Land Management and Development	\$203,000	\$262,000
Fish and Wildlife Management and Development	\$1,372,000	\$1,357,000
Facility Operations	\$615,000	\$544,000
Facility Maintenance and Rehabilitation	\$0	\$511,000
Request	\$2,389,000	\$2,856,000
Non-Federal	\$465,000	\$950,000
Other Federal – BPA Direct Funding	\$1,180,000	\$1,370,000
Other Federal – BPA Small Capital	\$50,000	\$50,000
Prior Year Funds	\$0	\$0
Total Program	\$4,084,000	\$5,226,000
Prior Year Funds/Non-Federal/Other Federal	(\$1,695,000)	(\$2,370,000)
Total Reclamation Allotment	\$2,389,000	\$2,856,000

WORK PROPOSED FOR FY 2020:

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. <u>Other</u> - Continues activities related to the elimination of unauthorized use of water. Continues program management support for planning activities. \$257,000 Non-Federal - Various (\$75,000)

Subtotal, Water and Energy Management and Development

\$182,000

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, Jackson County, the U.S. Forest Service, and the Bureau of Land Management. 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. Reclamation Recreation Management Act, Title XXVIII - Begins accessibility upgrades for Americans with Disability Act (ADA) at Agate, Emigrant, and Howard Prairie reservoir recreation sites. These facilities are out of compliance with the ADA standards.

\$322,000
Non-Federal – Various

(\$60,000)

Subtotal, Water and Energy Management and Development

\$262,000

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 operations. Biological Opinion (BiOp) Implementation - Continues implementation and agency coordination actions required for compliance with the 2012 Rogue River Basin Project National Oceanic and Atmospheric Administration Fisheries BiOp that seeks to protect Endangered Species Act (ESA) listed Southern Oregon and Northern California Coast Coho salmon. Continues placement and monitoring of large wood material instream to create fish habitat. Continues to pursue opportunities to supplement instream flow through acquisition and conservation. Continues to monitor the 18 acres of restored riparian zone vegetation along Bear Creek and its tributaries. Continues the cultural resources mitigation associated with the TID main canal piping project to provide additional instream flow. Continues review and implementation of measures to ensure Coho salmon redd protection. Continues implementation and agency coordination actions required for compliance with the 2004 Rogue River Basin Project U.S. Fish and Wildlife Service (USFWS) BiOp that seeks to protect ESA listed vernal pool fairy shrimp at Agate Lake. Continues coordination with the USFWS in anticipation of future reconsultation efforts involving the Oregon spotted frog in the Klamath Basin. \$1,357,000

Facility Operations - Continues 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 TID. Work includes stream gauging and hydromet system operations and maintenance costs. Continues land and recreation management activities at Howard Prairie, Hyatt, Keene Creek, Agate, and Emigrant Reservoirs under contract with Jackson County. Continues implementation of an 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.

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.	\$2,279,000
Other Federal - BPA Direct Funding	(\$1,370,000)
Other Federal - BPA Small Capital	(\$50,000)
Non-Federal - Jackson County Parks and Recreation Department	(\$130,000)
Non-Federal - Various Irrigation Districts	(\$185,000)

Subtotal, Facility Operations

\$544,000

Facility Maintenance and Rehabilitation – Begins work to replace the Howard Prairie Reservoir Resort Marina docks. Currently, the docks are not compliant with the Americans with Disabilities Act. This work is being conducted through a 50 percent cost share partnership with Jackson County Parks and Recreation. The increase is due to the work associated with the Howard Prairie Reservoir marina docks.

\$1,011,000

Non-Federal - Jackson County Parks & Recreation

(\$500,000)

Subtotal, Facility Maintenance and Rehabilitation

\$511,000

Reclamation Request

\$2,856,000

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 and delivers about 800,000 acre-feet of agricultural and municipal water annually. 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. Downstream of the confluence of the Verde into the Salt River, 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. Project facilities and most of the lands are Reclamation-owned.

AUTHORIZATION: Reclamation Act of 1902, 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, Arizona Water Settlements 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 24, 1974, Title I, as amended; and P.L. 109-110, Title II, Verde River Basin Partnership.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Togram Financiai Data	-	-
Activity	FY 2019 Enacted	FY 2020 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
Request	\$899,000	\$899,000
Non-Federal	\$101,000	\$60,000
Prior Year Funds	\$10,211	\$0
Total Program	\$1,010,211	\$959,000
Prior Year Funds/Non-Federal	(\$111,211)	(\$60,000)
Total Reclamation Allotment	\$899,000	\$899,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Begins work on a Northern Arizona Water Management study, working with local communities and watershed groups. This study seeks ways to ensure a reliable water supply by developing cooperative management strategies among the varied interests in the region to meet future water needs. Continues the Verde River Water Resources study focusing on further examination of a full range of problems associated with water quantity and quality. Work with others as appropriate to continue to explore initiatives related to supply and demand issues in the Verde River Basin. Monitor watershed conditions and identify methods to optimize watershed management.

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. Produce required asset management reports. Perform and maintain records management functions. Continues implementation of compliance activities. Continues trail access sites on SRP areas in Phoenix, Tempe, Scottsdale, and Glendale.

Non-Federal: Individual developers and municipalities

\$609,000

(\$60,000)

\$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. Oversight includes performing annual inspections, safety evaluations, and comprehensive and periodic reviews.

Subtotal, Facility Maintenance and Rehabilitation

\$187,000

Reclamation Request

\$899,000

Salton Sea Research Project

LOCATION: Imperial and Riverside Counties, California.

DESCRIPTION/JUSTIFICATION: The Salton Sea (Sea) is a terminal hypersaline (59 parts per thousand (ppt) vs. average 35ppt for ocean water), nutrient-rich lake in 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 storm water runoff. Annual inflow to the Sea averages about 800,000 acre-feet per year. The Bureau of Reclamation owns approximately 90,000 acres of land in and immediately adjacent to the Sea for the primary purpose of a suitable agricultural discharge location. The Sea covers about 376 square miles (970 km²), making it the largest saline lake in California. Due to over 90 percent loss of previously suitable habitat elsewhere in California, the Sea has become a major resting, feeding, and breeding stop for millions of migratory and resident birds along the international Pacific Flyway.

A combination of naturally decreasing water surface elevation, decreased water quality, increased salinity, and reduced future inflows due to system conservation and agriculture to urban water transfers is resulting in the eventual collapse of the existing (tilapia) fishery and associated ecosystem. This dramatic and predictable change will adversely impact wildlife habitat, human health, economic, and recreational values of the Sea and surrounding region. 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, construction projects, and evaluation has been implemented by entities in the State of California.

Congress enacted P.L. 105-372, the Salton Sea Reclamation Act of 1998 (Act), which authorized the Secretary of the Interior (Secretary), 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 an 18-month period. 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 Natural Resources Agency (CNRA), 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 CNRA's preferred alternative would have been an estimated \$8.9 billion in 2007 dollars. Because of its prohibitive cost, the State did not take further action at that time. The CNRA 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, 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 CNRA hired a Deputy Secretary for Salton Sea Policy to reinvigorate the State's Salton Sea management program in response to a 2014 petition by IID to the State Water Resources Control Board for immediate action to ensure follow through with the requirements of the QSA water transfer agreement, and new progress is being made.

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.

COMPLETION DATA: As of September 30, 2017, this project funding will be 76 percent expended.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$2,800,000	\$300,000
Request	\$2,800,000	\$300,000
Non-Federal	\$0	\$0
Prior Year Funds	\$475,562	\$0
Total Program	\$3,275,562	\$300,000
Prior Year Funds/Non-Federal	(\$475,562)	(\$0)
Total Reclamation Allotment	\$2,800,000	\$300,000

Total Cost Information

	Total Estimated Cost	Total to 9/30/18	FY 2019	FY 2020	Balance to Complete
Reclamation ^{1/}	\$45,000,000	\$36,313,869	\$2,800,000	\$300,000	\$5,586,131
Adjustments ^{2/}	\$10,350,000	\$2,518,584	\$0	\$0	\$7,831,416
Total	\$55,350,000	\$38,832,453	\$2,800,000	\$300,000	\$13,417,547

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:

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. On August 31, 2016, DOI and the State of California signed an MOU to facilitate specific, incremental and sequential projects in a timely manner that improve upon air and water quality, existing obligations to Native American communities, fish and wildlife habitat, water security, resource management processes and decision-making economic opportunities, and collaboration of scientific research efforts. Coordinating limited resources will be necessary to achieve common goals that address the natural resources and regional interests associated with the Sea. Depending upon specific actions taken by the State of California at the Salton Sea, Reclamation may have a significant funding need in future years to comply with Clean Air Act requirements on Reclamation managed lands.

The Great Basin Unified Air Pollution Control Districts (GBUAPCD) Owens Lake air quality mitigation program conducts the most similar Clean Air Act compliance program in proximity to the Sea. The GBUAPCD reports air quality mitigation establishment costs at approximately \$38 million per square mile (averaged over all types of mitigation) and annual maintenance costs of approximately \$500,000 per square mile. Reclamation estimates that approximately 8.75 square miles of Reclamation-owned lands will be emergent from the Sea as it recedes over the next 10 years. Even using extremely conservative estimates related to the costs at Owens Lake, Reclamation may still have significant air quality mitigation costs related to Clean Air Act requirements as the Sea recedes.

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 2020:

Water and Energy Management and Development - Continues coordination and exchange of technical expertise with the CNRA, the Salton Sea Authority, the Torres-Martinez Desert Cahuilla Indians and other area Tribes, and other stakeholders, including IID and CVWD. Continues to monitor water quality data trends and to mitigate air quality degradation associated with changes in the Sea's surface water level, through surveys to delineate Reclamation's potential liability, and development of air quality mitigation activities such as windrow placement (hay bales and/or ground ripping), wind-blocking vegetation planting, surfactant and/or gravel placement, in conjunction with similar adjacent landowner/stakeholder actions.

Reclamation Request

\$300,000

San Angelo Project

LOCATION: The San Angelo Project is in Tom Green County, in the immediate vicinity of the City of San Angelo in west central Texas.

DESCRIPTION/JUSTIFICATION: 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. Project operated by The City of San Angelo.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water infrastructure in good condition as measured by the Facility, Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$37,000	\$24,000
Facility Operations	\$582,000	\$566,000
Facility Maintenance and Rehabilitation	\$12,000	\$5,000
Enacted/Request	\$631,000	\$595,000
Non-Federal	\$19,000	\$5,000
Prior Year Funds	\$0	\$0
Total Program	\$650,000	\$600,000
Prior Year Funds/Non-Federal	(\$19,000)	(\$5,000)
Total Reclamation Allotment	\$631,000	\$595,000

WORK PROPOSED FOR FY 2020:

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. \$29,000

Non-Federal - City of San Angelo and Tom Green County Irrigation District (\$5,000)

Subtotal, Water and Energy Management and Development

\$24,000

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, wildland fire management, and administering land management programs. Continues cultural resources site protection activities for resources associated with the Project. Reclamation will also continue coordinating 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.

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam. Less funding is requested due to special examination requirements in FY 2019 not required in FY 2020.

\$5,000

Reclamation Request \$595,000

San Carlos Apache Tribe Water Rights Settlement Act

LOCATION: The San Carlos Apache Tribe (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 Tribe has historically not used these water supplies in substantial quantities due to limited water rights and lack of infrastructure. The Tribe had rights to irrigate 1,000 acres with 6,000 acre-feet annually of Gila River water. The San Carlos Apache 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 acrefeet 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; 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$1,550,000	\$1,550,000
Request	\$1,550,000	\$1,550,000
Development Fund – AWSA Revenues ^{1/}	\$5,000,000	\$5,000,000
Prior Year Funds	\$1,450,007	\$0
Total Program	\$8,000,007	\$6,550,000
Prior Year Funds/Other Federal	(\$1,450,007)	(\$0)
Development Fund – AWSA Revenues ^{1/}	(\$5,000,000)	(\$5,000,000)
Total Reclamation Allotment	\$1,550,000	\$1,550,000

¹/ An additional \$5,000,000 in funding has been requested under the Central Arizona Project, Indian Distribution Division. Funding will be provided by the Lower Colorado River Basin Development Fund (Development Fund) Arizona Water Settlements Act (AWSA) revenues.

Total Cost Information

	Total Estimated Cost	Total to 9/30/18	FY 2019	FY 2020	Balance to Complete
Reclamation ^{1/}	\$143,206,000	\$5,938,366	\$6,550,000	\$6,550,000	\$124,167,634
Total	\$143,206,000	\$5,938,366	\$6,550,000	\$6,550,000	\$124,167,634

^{1/}Total Estimated Cost revised to include the construction portion of the project and the latest cost indices.

Cost Allocation and Methodology

Allocation	FY 2019	FY 2020
Irrigation ^{1/}	\$138,726,000	\$143,206,000
Total	\$138,726,000	\$143,206,000

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 authorizing water settlement legislation; however, the Project Cost Estimate for the San Carlos Apache Indian Distribution Division of the CAP has been interpreted as the cost ceiling. This interpretation was most recently reaffirmed in 2013 in a Memorandum of Understanding between Reclamation and the Tribe.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues 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.

\$6,550,000

Development Fund - AWSA Revenues

(<u>\$5,000,000)</u>

Reclamation Request

\$1,550,000

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 about 12,500 acre-feet per year of 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$5,800	\$6,000
Land Management and Development	\$24,350	\$17,000
Fish and Wildlife Management and Development	\$104,200	\$104,000
Facility Operations	\$2,846,650	\$2,852,000
Facility Maintenance and Rehabilitation	\$19,000	\$0
Request	\$3,000,000	\$2,979,000
Non-Federal	\$0	\$0
Prior Year Funds	\$69,893	\$0
Total Program	\$3,069,893	\$2,979,000
Prior Year Funds/Non-Federal	(\$69,893)	\$0
Total Reclamation Allotment	\$3,000,000	\$2,979,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues management, oversight, and administration of the project. \$6,000

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. \$17,000

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, 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. Less funding is required due to the elimination of shelter belt irrigation systems. **\$104,000**

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. Continues bridge and annual inspections of Platoro Dam. \$2,852,000

Facility Maintenance and Rehabilitation – Funding is realigned to Facility Operations for consistency among regions and within Reclamation's Programmatic Budget Structure.

Reclamation Request \$2,979,000

Sanpete Project

LOCATION: The project is 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$59,000	\$29,000
Facility Maintenance and Rehabilitation	\$13,000	\$50,000
Enacted/Request	\$72,000	\$79,000
Non-Federal	\$0	\$0
Prior Year Funds	\$6,490	\$0
Total Program	\$78,490	\$79,000
Prior Year Funds/Non-Federal	(\$6,490)	\$0
Total Reclamation Allotment	\$72,000	\$79,000

WORK PROPOSED FOR FY 2020:

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 oversight and administration of contract repayment. Continues the ongoing development and installation of a comprehensive watershed management instrumentation system to improve efficiency and effectiveness of water operations in Sanpete County. Less funding is requested due to lower program development efforts due to changes in program objectives. \$29,000

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. Increase is due to a realignment of project-based priorities because of planned changes in scheduled project requirements. \$50,000

Reclamation Request \$79,000

Scofield Project

LOCATION: The project is 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 2018-2022.

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and

activities

Measure: Number of Threatened or Endangered species recovery activities implemented

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$68,000	\$50,000
Land Management and Development	\$185,000	\$263,000
Facility Operations	\$58,000	\$94,000
Facility Maintenance and Rehabilitation	\$41,000	\$34,000
Enacted/Request	\$352,000	\$441,000
Non-Federal	\$0	\$0
Prior Year Funds	\$13,349	\$0
Total Program	\$365,349	\$441,000
Prior Year Funds/Non-Federal	(\$13,349)	\$0
Total Reclamation Allotment	\$352,000	\$441,000

WORK PROPOSED FOR FY 2020:

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 oversight

and administration of contract repayment. 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. \$50,000

Land Management and Development - Continues land resources management, to include asset inventory system database management, Geographic Information System activities, 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, grant 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.

\$263,000

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. **\$94,000**

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. \$34,000

Reclamation Request \$441,000

Shoshone Project

LOCATION: This project is located in Bighorn and Park Counties in northwestern Wyoming.

DESCRIPTION/JUSTIFICATION: The Shoshone Project (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 cyclopean concrete, constant arch structure that impounds Buffalo Bill Reservoir with an active capacity of 604,817 acre feet. Storage water of approximately 634,000 acre-feet per year 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).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Amount of acre feet of water conservation capacity enabled to help address drought

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

(FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$34,000	\$34,000
Facility Operations	\$747,000	\$916,000
Facility Maintenance and Rehabilitation	\$14,000	\$26,000
Enacted/Request	\$795,000	\$976,000
Non-Federal	\$38,000	\$38,000
Prior Year Funds	\$0	\$0
Total Program	\$833,000	\$1,014,000
Prior Year Funds/Non-Federal	(\$38,000)	(\$38,000)
Total Reclamation Allotment	\$795,000	\$976,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development – Continues to provide support to project partners for the coordination, management, and implementation of water conservation plans, and negotiation and administration of water marketing which provides for administration of contracts with four irrigation districts and nine entities. \$34,000

Facility Operations - 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. Facility Operations funding is adjusted within the projects to meet the scheduled O&M needs for FY 2020.

\$954,000

Non-Federal - Shoshone Irrigation District

(\$38,000)

Subtotal, Facility Operations

\$916,000

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. The funding varies depending on the type of required annual inspections at the dam. Increase is due to additional O&M review requirements in FY 2020. \$26,000

Reclamation Request \$976,000

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); Monticello Hydroelectric Power Plant, owned and operated by Solano Irrigation District, built in 1983, with a capacity of 11.5 megawatts; 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 with 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. Terminal dam, 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 also furnishes municipal and industrial water to the principal cities of Solano County. In total, the project provides approximately 199,000 acre-feet of water per year. Recreational opportunities are available at Reclamation operated recreation areas and seven resorts operated by private entities. These recreational features host over 700,000 visits per year.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$60,000	\$60,000
Land Management and Development	\$1,102,000	\$1,102,000
Facility Operations	\$2,534,000	\$2,233,000
Enacted/Request	\$3,696,000	\$3,395,000
Prior Year Funds	\$40,921	\$0
Total Program	\$3,736,921	\$3,395,000
Prior Year Funds	(\$40,921)	\$0
Total Reclamation Allotment	\$3,696,000	\$3,395,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues the administration and monitoring of the National Environmental Policy Act process, in accordance with all federally-mandated requirements; providing review and approval for any proposed major renovations to or development of concession related facilities in compliance with the Visitor Services Plan and Record of Decision. \$60,000

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. \$1,102,000

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.

\$2,233,000

Reclamation Request \$3,395,000

SEE APPENDIX FOR: Obligation by Function for Operating Projects

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 annually deliver up to 16,000 acre-feet of Central Arizona Project (CAP) water to the Schuk Toak District and 50,000 acre-feet of CAP water to the San Xavier District of the Tohono O'odham Nation (Nation), or otherwise used as authorized in the statute, 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 Department of Interior-Office of the Special Trustee, through the Bureau of Indian Affairs, administers the Cooperative Fund and transfers funds to Reclamation for operational costs.

The Cooperative Fund pays for the pumping energy and the Operation, Maintenance, and Replacement (OM&R) costs. As funds are available, the fixed OM&R rate component for the delivery of CAP water is paid out of the Lower Colorado River Basin Development Fund (Development Fund), as authorized in the Arizona Water Settlements Act. The Development Fund budget request for fixed OM&R costs is contained within the Lower Colorado River Basin Development Fund-Arizona Water Settlements Act narrative. When funds are no longer available in the Development Fund, payment for the fixed OM&R rate component for CAP water, payment will revert to the Cooperative Fund. Without additional action, it is projected that the Cooperative Fund may experience shortfalls in expendable funds as soon as 2022.

AUTHORIZATION: Southern Arizona Water Rights Settlement Act of 1982, October 12, 1982, as amended by P.L.108-451. The Arizona Water Settlements Act of 2004, December 10, 2004, P.L. 108-451, 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$0	\$0
Request	\$0	\$0
Prior Year Funds/ Other Federal	\$5,404,000	\$3,800,000
Total Program	\$5,404,000	\$3,800,000
LCRBDF – AWSA Revenues	\$0	\$0
Prior Year Funds/Other Federal	(\$5,404,000)	(\$3,800,000)
Total Reclamation Allotment	\$0	\$0

WORK PROPOSED FOR FY 2020:

Facility Operations - Schuk Toak District and San Xavier Water District Delivery - Continues water delivery through the CAP system and performs OM&R 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. Less funding is requested due to revised projections of water delivery costs. \$3,800,000

Other Federal - Bureau of Indian Affairs

(\$3,800,000)

Reclamation Request

\$0

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

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

Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$219,000	\$274,000
Land Management and Development	\$532,000	\$584,000
Facility Maintenance and Rehabilitation	\$46,000	\$70,000
Enacted/Request	\$797,000	\$928,000
Non-Federal	\$0	\$0
Prior Year Funds	\$11,252	\$0
Total Program	\$808,252	\$928,000
Prior Year Funds/Non-Federal	(\$11,252)	\$0
Total Reclamation Allotment	\$797,000	\$928,000

WORK PROPOSED IN FY 2020:

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. \$274,000

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, grant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. \$584,000

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. **\$70,000**

Reclamation Request \$928,000

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 approximately 97,080 acres of project lands.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$29,000	\$86,000
Fish and Wildlife Management and Development	\$23,000	\$21,000
Facility Operations	\$246,000	\$383,000
Facility Maintenance and Rehabilitation	\$22,000	\$15,000
Enacted/Request	\$320,000	\$505,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$320,000	\$505,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$320,000	\$505,000

WORK PROPOSED FOR FY 2020:

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. Increase in funding is due to greater emphasis on water quality monitoring activities. \$86,000

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. **\$21,000**

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. Facility Operations funding is adjusted within the projects to meet the scheduled O&M needs for FY 2020. \$383,000

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. The funding varies depending on the type of required annual inspections at the dam.

\$15,000

Reclamation Request

\$505,000

Tualatin Project

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

DESCRIPTION/JUSTIFICATION: The Project provides about 20,000 acre-feet of irrigation water to approximately 17,000 acres of land, additionally the project also provides 14,000 acre-feet of water for municipal and industrial purposes to four nearby communities. Principle features 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, and water quality monitoring. The Project also provides oversight of recreation management of Henry Hagg Lake which is managed by Washington County and receives about 900,000 visitors per year, 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. 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. 98-293, Reclamation Reform Act of 1982, as amended; 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$23,000	\$12,000
Land Management and Development	96,000	172,000
Fish and Wildlife Management and Development	58,000	99,000
Facility Operations	212,000	268,000
Facility Maintenance and Rehabilitation	4,000	35,000
Request	\$393,000	\$586,000
Non-Federal	205,000	340,000
Prior Year Funds	0	0
Total Program	\$598,000	\$926,000
Prior Year Funds/Non-Federal/Other Federal	(205,000)	(340,000)
Total Reclamation Allotment	\$393,000	\$586,000

WORK PROPOSED FOR FY 2020:

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 within the Tualatin Project. Other - Continues activities related to the elimination of unauthorized use of water. Less funding is requested due to lower projected need for labor associated with water rights activities and a decrease in water conservation field services actions during the fiscal year. \$12,000

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 construction on a new campground with approximately 120 campsites at Henry Hagg reservoir to comply with the Americans with Disabilities Act. Construction will be in partnership with Washington County Parks and Recreation Department (WCPRD) through a cost-share grant. Increase due to Title XXVIII funding for the campsite construction.

\$242,000
Non-Federal – WCPRD

(\$70,000)

Subtotal, Land Management and Development

\$172,000

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 Section 7 requirements for threatened and endangered species on Federal lands to ensure that any action authorized, funded, or carried out by Reclamation at Henry Hagg Lake, Scoggins Creek, or the Tualatin River does not jeopardize the continued existence of either the Kincaid's lupine, Fender's blue butterfly, Chinook salmon, or steelhead trout. Continues coordination and reporting with the U.S. Fish and Wildlife and National Oceanic and Atmospheric Administration Fisheries for implementation requirements of final BiOps that were received in 2014. Increase due to planned mitigation and prairie management actions to comply with the conditions of the 2014 BiOp.

\$99,000

Facility Operations - Continues day to day operation at Scoggins Dam to include flood control functions and associated operation and maintenance (O&M). This includes streamgaging, hydromet system O&M 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 the 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. Increase due to planned cooperative agreement with WCPRD for daily O&M of recreation sites at Henry Hagg Reservoir. \$538,000

Non-Federal - Various (\$270,000)

Subtotal, Facility Operations

\$268,000

Facility Maintenance and Rehabilitation - Continues required annual completion of high and significant hazard dams reviews and examinations (annual site inspections, periodic facility reviews, etc.). These reviews are conducted on a four-year rotating schedule. Increase due to a comprehensive facility review scheduled to be performed at Scoggins Dam. \$35,000

Reclamation Request

\$586,000

Tucumcari Project

LOCATION: The project is 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$11,000	\$15,000
Land Management and Development	\$4,000	\$0
Facility Maintenance and Rehabilitation	\$16,000	\$5,000
Request	\$31,000	\$20,000
Non-Federal	\$0	\$0
Prior Year Funds	\$2,571	\$0
Total Program	\$33,571	\$20,000
Prior Year Funds/Non-Federal	(\$2,571)	\$0
Total Reclamation Allotment	\$31,000	\$20,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues contract oversight and administration.

\$15,000

Tucumcari Project

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 \$20,000

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. The project delivers approximately 138,000 acre-feet of water per year.

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; and P.L. 97-293, Reclamation Reform Act of 1982, as amended; and P.L. 100-557, Water Exchange Facilities, October 28, 1988.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure**: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$89,000	\$65,000
Land Management and Development	\$251,000	\$255,000
Fish and Wildlife Management and Development	\$232,000	\$68,000
Facility Operations	\$2,524,000	\$2,429,000
Facility Maintenance and Rehabilitation	\$25,000	\$448,000
Request	\$3,121,000	\$3,265,000
Non-Federal	\$148,000	\$138,000
Prior Year Funds	\$0	\$0
Total Program	\$3,269,000	\$3,403,000
Prior Year Funds/Non-Federal/Other Federal	(\$148,000)	(\$138,000)
Total Reclamation Allotment	\$3,121,000	\$3,265,000

WORK PROPOSED FOR FY 2020:

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 efficient use of water supplies and water conservation to aid in the protection of threatened and endangered species within the Umatilla Project. 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 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.

\$80,000
Non-Federal - Various

Subtotal, Water and Energy Management and Development

\$65,000

Land Management and Development - Continues general land management activities. All 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. Continues review of other agencies' National Environmental Policy Act documents and plans which may affect Reclamation's operations. Biological Opinion (BiOp) Implementation - Continues coordinating and reporting implementation actions required in the expired National Oceanic Atmospheric Administration (NOAA) Fisheries BiOp on the Umatilla Project's operations and maintenance (O&M). Reclamation anticipates issuance of a final BiOp from NOAA in early 2019. Continues compliance with Reasonable and Prudent Measures from NOAA Fisheries BiOp and U.S. Fish and Wildlife Service (USFWS) BiOp to reduce take of listed species. Less funding is requested for USFWS fisheries monitoring in the fiscal year based on meeting the terms and conditions of the BiOp.

Facility Operations - Continues O&M 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 O&M, 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 the Umatilla facilities.

Continues Umatilla Supervisory Control and Data Acquisition (SCADA) system O&M, and the annual certification and accreditation of the Umatilla SCADA system to comply with Reclamation's Federal Information Security Management Act requirements. \$2,552,000
Non-Federal - Water Users (\$123,000)

Subtotal, Facility Operations

\$2,429,000

Facility Maintenance and Rehabilitation - Begins and completes replacement of the trash rake at the Cold Springs pumping plant. The trash rake will wear at an increasing rate eventually requiring more unplanned down time for emergency repairs during irrigation season. Prolonged downtime could impact Reclamation's ability to meet water deliveries which could have a negative impact on endangered or threatened species and the agricultural community thereby leading to potential litigation. 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. Increase due to the planned replacement of the Cold Springs Atlas Polar trash rake system.

Reclamation Request \$3,265,000

Uncompangre Project

LOCATION: The project is 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Number of Threatened or Endangered species recovery activities implemented

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019	FY 2020
	Enacted	President's Budget
Water and Energy Management and Development	\$61,000	\$40,000
Land Management and Development	\$94,000	\$175,000
Fish and Wildlife Management and Development	\$612,000	\$493,000
Facility Operations	\$94,000	\$70,000
Facility Maintenance and Rehabilitation	\$80,000	\$80,000
Request	\$941,000	\$858,000
Non-Federal	\$0	\$0
Prior Year Funds	\$37,573	\$0
Total Program	\$978,573	\$858,000
Underfinancing	\$0	\$0
Prior Year Funds/Non-Federal	(\$37,573)	\$0
Total Reclamation Allotment	\$941,000	\$858,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Continues water quality monitoring tasks.

Continues tasks required to ensure the delivery of project water and benefits which include 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.

\$40,000

Land Management and Development - Continues land management activities which consist of complying with and administering laws and regulations, execution of agreements, contracts, and grants or other agreements for the use and management of lands and the protection of recreation facilities and land resources. Continues to provide National Environmental Policy Act compliance in association with public requests to use recreation land and facilities. \$175,000

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. This action is required by the Programmatic Biological Opinion for the Gunnison River Basin. \$493,000

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. \$70,000

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. **\$80,000**

Reclamation Request \$858,000

United States/Mexico Border Issues

LOCATION: The program encompasses the U.S./Mexico border area that falls within the confines of the Upper Colorado Region.

DESCRIPTION/JUSTIFICATION: Funds for this program are used to coordinate and manage, with the International Boundary and Water Commission (IBWC), the requirement of the 1906 Convention Agreement with Mexico. This agreement requires the delivery of 60,000 acre feet of water to Mexico from Reclamation's Rio Grande Project water resources. Reclamation staff provides informational data and technical support, as necessary, to advise the IBWC on any issue regarding Reclamation water resources and on any IBWC river maintenance activity that may impact Reclamation's requirement for water delivery.

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$90,000	\$80,000
Request	\$90,000	\$80,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$90,000	\$80,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$90,000	\$80,000

WORK PROPOSED FOR FY 2020:

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. \$80,000

Reclamation Request \$80,000

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 the legal responsibility as water master to manage the Lower Basin, the statutory authority to operate the Colorado River Storage Project reservoirs in the Upper Basin and the statutory responsibility to coordinate river operations between the two basins. Reclamation provides 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.

Reclamation 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 re-consultation 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. Re-consultation on the 2007 Interim Guidelines is required to begin in 2020 and Reclamation will need to conduct modeling of potential scenarios prior to that date. Maintenance and development of Reclamation's Colorado River Simulation System model and Reclamation's Hydrologic Database are also necessary to support these activities.

The Program also supports data collection and analysis efforts to improve runoff forecasting and consumptive use and losses (CU&L) of water use, improve evaporation computations, evaluate current storage capacities and modify operating criteria required to administer the Colorado River Storage Project Act reservoirs and the Colorado River Compact. Reclamation is currently working with the Upper Basin States to develop extended data collection systems, common methodologies and CU&L estimations.

AUTHORIZATION: P.L. 90-537, the Colorado River Basin Project Act, September 30, 1968; Colorado River Storage Project Act, April 11, 1956, Chapter 203 – PL 485; P.L. 93-205, the Endangered Species Conservation Act, December 28, 1973; P. L. 113-235 Title II, Sec. 203 and Sec. 206, Consolidated and Further Continuing Appropriations Act, 2015, December 16, 2014; and P. L. 115-244 Title II, Sec. 205 Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, September 21, 2018.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$1,620,000	\$729,000
Request	\$1,620,000	\$729,000
Non-Federal	\$0	\$0
Prior Year Funds	\$502,857	\$0
Total Program	\$2,122,857	\$729,000
Prior Year Funds/Non-Federal	(\$502,857)	\$0
Total Reclamation Allotment	\$1,620,000	\$729,000

WORK PROPOSED FOR FY 2020:

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 operations of the Colorado River Storage Project reservoirs and coordinated operation of Lake Powell and Lake Mead. Continues consultation, coordination, and water accounting between Reclamation and Basin States. Continues to develop and refine tools for water management (control systems, data acquisition, forecasting techniques, remote measurement and monitoring systems) and use them to perform water supply planning studies; to assess future risks to the water supply of 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 modeling and analysis in response to Drought Contingency Plans for the Upper Basin States.

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 modeling and analysis for environmental compliance tasks.

Continues annual consultation required by law with Basin States and other stakeholders to develop the Colorado River Annual Operating Plan. Continues modeling and participation for renegotiation of the 2007 Interim Guidelines. Continues conduct of sediment surveys at Upper Colorado River basin reservoirs to assess water availability in the face of extended drought, support of efforts toward a System Conservation / Demand Management Program in coordination with the Upper Basin States and the Upper Colorado River Commission. Increase is due to increased modeling, analysis and involvement in renegotiation of the 2007 Interim Guidelines and Basin States Drought Contingency Plans, and additional sediment surveys to assess water availability in Upper Basin reservoirs in the face of extended drought. Less funding is required in FY 2020 due to the completion of drought response activities. \$729,000

Reclamation Request \$729,000

Ventura River Project

LOCATION: The Ventura River Project (Project) is located in southern California about sixty miles northwest of Los Angeles.

DESCRIPTION/JUSTIFICATION: The Project comprises a storage reservoir on Coyote Creek, a diversion dam on the Ventura River, a canal to carry water from the diversion dam to the reservoir, and a high-pressure pipeline distribution system. The distribution system has pumping plants and balancing reservoirs to annually distribute about 10,000 acre-feet of water from Lake Casitas to areas within Ventura County for irrigation, municipal, and industrial uses.

The main Project facilities include Casitas Dam and Reservoir on Coyote Creek about two miles above its junction with the Ventura River. The Robles Diversion Dam located on the Ventura River about 1.5 miles downstream from the river's formation, diverting much of its flow to Coyote Creek. The Robles-Casitas Canal, which conveys the diverted flow of the Ventura River into Coyote Creek and then Lake Casitas, and the main conveyance system, which includes 34 miles of pipeline, five pumping stations, and six balancing reservoirs located throughout the Project area. The reservoir has a storage capacity of 254,000 acre-feet of water. Casitas Dam and Reservoir are operated and maintained by Casitas Municipal Water District. Project facilities also provide recreation benefits, with an estimated annual visitation of 714,000.

AUTHORIZATION: The Project was authorized by an act of Congress (P.L. 84-423, March 1, 1956).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

0		
Activity	FY 2019 Enacted	FY 2020 President's Budget
Land Management and Development	\$400,000	\$380,000
Facility Operations	\$10,000	\$10,000
Facility Maintenance and Rehabilitation	\$26,000	\$44,000
Enacted/Request	\$436,000	\$434,000
Prior Year Funds	\$3,817	\$0
Total Program	\$439,817	\$434,000
Prior Year Funds	(\$3,817)	\$0
Total Reclamation Allotment	\$436,000	\$434,000

WORK PROPOSED FOR 2020:

Land Management and Development - Continues Reclamation's responsibility to administer the Ventura Project Lands and Casitas Open Space Lands for the protection of the watershed and water quality, manage project lands for recreation and wildlife habitat, preparation and administration of a resource management plan, and other land use compliance activities. Continues National Environmental Policy Act and Endangered Species Act compliance activities in association with public requests to use or alter recreational lands and facilities. \$380,000

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 three year cycle with annual reviews. \$10,000

Facility Maintenance and Rehabilitation - Continues the Review of Operations and Maintenance (RO&M) program, which includes a Comprehensive Review and/or Periodic Facility Review, and an annual site inspection. Continues the Security of Facility Program, which includes a Comprehensive Security Review and/or Periodic Security Review, and an annual site inspection. Continues facility modifications to meet Federal accessibility standards.

\$44,000

Reclamation Request \$434,000

SEE APPENDIX FOR: Obligations by Function for Operating Projects

Status of NEPA Compliance

W. C. Austin Project

LOCATION: This project is located in Greer, Jackson, and Kiowa Counties in southwestern Oklahoma.

DESCRIPTION/JUSTIFICATION: The W.C. Austin Project (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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and waters

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$57,000	\$22,000
Land Management and Development	\$0	\$17,000
Facility Operations	\$489,000	\$490,000
Facility Maintenance and Rehabilitation	\$66,000	\$13,000
Enacted/Request	\$612,000	\$542,000
Non-Federal	\$26,000	\$5,000
Prior Year Funds	\$0	\$0
Total Program	\$638,000	\$547,000
Prior Year Funds/Non-Federal	(\$26,000)	(\$5,000)
Total Reclamation Allotment	\$612,000	\$542,000

WORK PROPOSED FOR FY 2020:

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. Water conservation plans, and management strategies are in place and not required to be updated in FY 2020. \$27,000

Non-Federal - Lugert-Altus Irrigation District and Oklahoma

(\$5,000)

Water Resources Board

Subtotal, Water and Energy Management and Development

\$22,000

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 in funding to meet the recreational needs of the project. \$17,000

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 programs. Continues cultural resources site protection activities for resources associated with the Project. \$490,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam. Less funding is requested due to special examination requirements in FY 2019 that are not required in FY 2020. **\$13,000**

Reclamation Request \$542,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$70,000	\$111,000
Land Management and Development	\$243,000	\$260,000
Fish and Wildlife Management and Development	\$16,000	\$10,000
Facility Operations	\$138,000	\$84,000
Request	\$467,000	\$465,000
Non-Federal	\$25,000	\$60,000
Prior Year Funds	\$0	\$0
Total Program	\$492,000	\$525,000
Prior Year Funds/Non-Federal/Other Federal	(\$25,000)	(\$60,000)
Total Reclamation Allotment	\$467,000	\$465,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - <u>Project Water Conservation Assistance</u> - Continues providing 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 in the Washington Area Projects. <u>Other</u> - Continues program management support for planning activities. \$171,000

Non-Federal - Various (\$60,000)

Subtotal, Water and Energy Management and Development

\$111,000

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 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, rights-of-ways and consent-to-use. Continues administering leases including grazing and gravel pits.

\$260,000

Fish and Wildlife Management and Development - Continues assistance of non-Reclamation entities for resource monitoring/inventory efforts. Continues Project involvement to respond to requests from natural resource agencies for operational data relevant to fish and wildlife issues. 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 operations or facilities. Continues review of other agencies' National Environmental Policy Act documents and plans which may affect Project operations.

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.

\$84,000

Reclamation Request \$465,000

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 (Project) include Foss Dam and Reservoir (Foss), Fort Cobb Dam and Reservoir (Fort Cobb), 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 facilities provide municipal and industrial water to the communities of Clinton, Bessie, Cordell and Hobart. The Fort Cobb Division provides municipal and industrial water to the Western Farmers Electric Cooperative, the City of Anadarko, and the City of Chickasha. Other authorized purposes of the Project 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

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

Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and waters

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$77,000	\$44,000
Land Management and Development	\$163,000	\$10,000
Facility Operations	\$1,083,000	\$1,030,000
Facility Maintenance and Rehabilitation	\$10,000	\$61,000
Enacted/Request	\$1,333,000	\$1,145,000
Non-Federal	\$127,000	\$10,000
Prior Year Funds	\$0	\$0
Total Program	\$1,460,000	\$1,155,000
Prior Year Funds/Non-Federal	(\$127,000)	(\$10,000)
Total Reclamation Allotment	\$1,333,000	\$1,145,000

WORK PROPOSED FOR FY 2020:

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. Water conservation plans and management strategies are in place and not required to be updated in FY 2020. \$54,000

Non-Federal - Fort Cobb Master Conservancy District and Foss

(\$10,000)

Reservoir Master Conservancy

Subtotal, Water and Energy Management and Development

\$44,000

Land Management and Development - Funding will be used to improve recreation facilities and to comply with health, safety, and accessibility requirements at the project. Funding for project prioritized to meet mission critical activities under Facility Operations and Facility Maintenance and Rehabilitation.

\$10,000

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, wildland fire management, and administering land management programs. Continues cultural resources site protection activities for resources associated with the Project. \$1,030,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam. Increase is due to additional O&M review requirements in FY 2020. \$61,000

Reclamation Request \$1,145,000

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. Benefits derived by the Weber Basin Project include irrigation, recreation, fish and wildlife, and Municipal and Industrial water services. In full operation, the Weber Basin Project provides an average of 166,000 acre-feet of water annually for irrigation and 50,000 acre-feet for municipal and industrial use in a heavily populated and industrialized area. 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$667,000	\$784,000
Land Management and Development	\$415,000	\$525,000
Fish and Wildlife Management and Development	\$0	\$100,000
Facility Operations	\$696,000	\$610,000
Facility Maintenance and Rehabilitation	\$263,000	\$509,000
Enacted/Request	\$2,041,000	\$2,528,000
Non-Federal	\$0	\$0
Prior Year Funds	\$16,334	\$0
Total Program	\$2,057,334	\$2,528,000
Prior Year Funds/Non-Federal	(\$16,334)	\$0
Total Reclamation Allotment	\$2,041,000	\$2,528,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - 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. \$784,000

Land Management and Development - Continues land resources management, to include asset inventory system database management, Geographic Information System activities, 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, grant 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.

Fish and Wildlife Management and Development - Begins work to prevent the spread of Quagga Mussels and other aquatic invasive species in the system. As a new and emerging threat to Reclamation facilities administered by the Provo Area Office, these funds will be used to reduce the risk of infestation. Increase is due to new work to prevent the spread of Quagga Mussels. **\$100,000**

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 assistance to local governments and emergency management personnel in the development of local Emergency Operations Plans. Continues revision to project facilities Emergency Action Plans and Standing Operating Procedures.

\$610,000

Facility Maintenance and Rehabilitation - Continues review of operation and maintenance of project facilities operated and maintained by water user entities. Continues oversight and review under the Examination of Existing Structures Program. Increase in funding request is due to a realignment of project-based priorities because of planned changes in scheduled project requirements. **\$509,000**

Reclamation Request \$2,528,000

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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$44,000	\$44,000
Land Management and Development	\$1,350,000	\$1,554,000
Fish and Wildlife Management and Development	\$0	\$100,000
Facility Operations	\$105,000	\$108,000
Facility Maintenance and Rehabilitation	\$93,000	\$26,000
Enacted/Request	\$1,592,000	\$1,832,000
Non-Federal	\$0	\$1,500,000
Prior Year Funds	\$4,420	\$0
Total Program	\$1,596,420	\$3,332,000
Prior Year Funds/Non-Federal	(\$4,420)	(\$1,500,000)
Total Reclamation Allotment	\$1,592,000	\$1,832,000

COST SHARING: State of Utah, Division of Parks and Recreation in FY 2020.

WORK PROPOSED FOR FY 2020:

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 oversight and administration of contract repayment. \$44,000

Land Management and Development - Continues land resources management to include asset inventory system database management, Geographic Information System activities, 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, grant and agreement processing, trespass resolution in conjunction with oversight of the unauthorized use of project lands, and administrative reporting. Continues recreation rehabilitation activities at Echo Reservoir as well as recreation management and oversight of the project facilities by the managing entity. Increase in funding and Non-Federal cost share is due to the need to rehabilitate recreation facilities at Echo Reservoir to address public safety concerns. Reclamation re-acquired the recreation contract at Echo Reservoir in 2017.

"Additional Funding for Ongoing Work" provided by Congress in FY 2019 was allocated in part for infrastructure upgrades at Echo State Park.

\$3,054,000

Non-Federal (State of Utah)

Subtotal, Land Management and Development

\$1,554,000

Fish and Wildlife Management and Development - Begins work to prevent the spread of Quagga Mussels and other aquatic invasive species in the system. As a new and emerging threat to Reclamation facilities administered by the Provo Area Office, these funds will be used to reduce the risk of infestation Increase due to new work to prevent the spread of Quagga Mussels. **\$100,000**

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. \$108,000

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. \$26,000

Reclamation Request \$1,832,000

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 Wichita. The City of Wichita and the Kansas Department of Wildlife, Parks and Tourism 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

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

Rating (FRR) [high-and significant hazard dams]

Mission Area 3: Expanding Outdoor Recreation and Access

Goal #1: Expand hunting, fishing, and other recreation on DOI lands and waters

Measure: Number of individuals participating in outdoor recreation activities at special events

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$46,000	\$23,000
Land Management and Development	\$287,000	\$13,000
Facility Operations	\$398,000	\$347,000
Facility Maintenance and Rehabilitation	\$5,000	\$5,000
Enacted/Request	\$736,000	\$388,000
Non-Federal	\$29,000	\$5,000
Prior Year Funds	\$0	\$0
Total Program	\$765,000	\$393,000
Prior Year Funds/Non-Federal	(\$29,000)	(\$5,000)
Total Reclamation Allotment	\$736,000	\$388,000

WORK PROPOSED FOR FY 2020:

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. \$28,000
Non-Federal - City of Wichita (\$5,000)

Subtotal, Water and Energy Management Development

\$23,000

Land Management and Development - Funds will be used to improve recreation facilities and to comply with health, safety, and accessibility requirements at the project. Less funding is requested due to prior year installation a new rural water line. \$13,000

Facility Operations - 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 fish and wildlife management, recreation planning and development, National Environmental Policy Act compliance, public safety and universal accessibility compliance, and administering land management programs. Continues cultural resources site protection activities for resources associated with the Project.

\$347,000

Facility Maintenance and Rehabilitation - Continues facility examinations to ensure structural integrity relating to safe and reliable operation of the structures. The funding varies depending on the type of required annual inspections at the dam.

\$5,000\$

Reclamation Request \$388,000

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, Tieton 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 about 2.1 million acre-feet per year of 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 operations and maintenance (O&M) of Phase I of the fish screen construction. Funding for the O&M of Phase II of the fish screen construction is provided by Bonneville Power Administration (BPA). Through a separate Memorandum of Agreement, BPA directly funds power O&M costs. In addition, BPA directly funds major power replacements, additions, and improvements through subagreements.

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 2018-2022:

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$157,000	\$183,000
Land Management and Development	\$300,000	\$587,000
Fish and Wildlife Management and Development	\$287,000	\$541,000
Facility Operations	\$5,242,000	\$5,645,000
Facility Maintenance and Rehabilitation	\$841,000	\$356,000
Request	\$6,827,000	\$7,312,000
Non-Federal	\$1,347,000	\$804,000
Other Federal - BPA Direct Funding	\$3,327,000	\$3,109,000
Other Federal - BPA Subagreement	\$350,000	\$4,178,000
Other Federal - BPA Small Capital	\$135,000	\$100,000
Other Federal – BPA Multipurpose	\$250,000	\$0
Other Federal - BPA Fish Facility	\$115,000	\$115,000
Other Federal - Bureau of Indian Affairs	\$555,000	\$290,000
Total Program	\$12,906,000	\$15,908,000
Prior Year Funds/Non-Federal/Other Federal	(\$6,079,000)	(\$8,596,000)
Total Reclamation Allotment	\$6,827,000	\$7,312,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Project Water Conservation Assistance - Continues 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 Yakima Project. Other - Continues River Ware modeling to run various scenarios for watershed planning and climate change scenarios. Continues program management support for planning activities.

\$208,000 Non-Federal - Various (\$25,000)

Subtotal, Water and Energy Management and Development

\$183,000

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 operations, acquiring and disposing of land interest, cleaning up dump sites that may contain hazardous waste, conducting surveys for cultural resources, conducting field reviews, 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. Increase is due to anticipated land acquisitions, inquiries, and support costs to ensure that Reclamation administered lands are managed consistently with resource objectives. \$587,000

Fish and Wildlife Management and Development - Continues Project involvement to respond to requests from natural resource agencies for operational data relevant to fish and wildlife issues. Continues review of other agencies' National Environmental Policy Act documents and plans, which may affect operations. Biological Opinion (BiOp) Implementation - Continues evaluation of smolt survival through radio transmitter tagged smolts within the Chandler Bypass Reach. Continues efforts to provide fish passage at Clear Creek Dam for bull trout. Continues conducting measurements and evaluation of channel morphology as reservoir flows fluctuate to show when bull trout passage impediments occur. Continues trap and transport program by conducting hydroacoustic monitoring, snorkeling surveys, and statistical analysis, for bull trout population estimates downstream of the reservoirs. Increase is due to coordination and reporting needed for BiOps and scientific monitoring of down-ramping and river operations. \$541,000

Facility Operations - Continues O&M 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 O&M of Phase I and 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 the Projects effect on endangered salmon and trout.

Power Items - Continues day-to-day O&M of Roza and Chandler Power Plants under the direct funding

agreement with bi A.	\$10,036,000
Other Federal - BPA Direct Funding	(\$3,109,000)
Other Federal - BPA Small Capital	(\$100,000)
Other Federal - BPA Fish Facility	(\$115,000)
Other Federal - Bureau of Indian Affairs	(\$290,000)
Non-Federal - Water Users	(\$779,000)

Subtotal, Facility Operations

\$5,645,000

Facility Maintenance and Rehabilitation - Continues implementing the alternative fish screening method at the Roza screen site in the Roza Canal to protect salmon spawning beds, newly emergent spring Chinook salmon and continue compliance with current NMFS approach/sweep velocity criteria. Continues required annual inspections of high and significant hazard dams and technical assistance to operating entities for completion of O&M 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. Less funding is requested for the Roza screen modification activity for current year requirements.

<u>Power Items</u> - Completes service to both main transformers in the Roza Switch Yard to provide continued power generation and provide Project power to Roza Irrigation Pumps in agreement with BPA.

\$4,534,000

Other Federal - BPA Subagreement

(\$4,178,000)

Subtotal, Facility Maintenance and Rehabilitation

\$356,000

Reclamation Request

\$7,312,000

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 Yakima River Basin Conservation Program will remain instream and 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 (YRBWEP), December 28, 1979; P.L. 98-381, Hoover Power Plant Act, August 17, 1984; P.L. 93-638 Indian Self Determination and Education Assistance Act of 1975 as amended August 23, 1996; 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, 2018, the Project is 50 percent complete. This is a five percent increase from fiscal year FY 2019 estimates. Nearly all planning has been completed for water conservation activities including the on-reservation planning. Many of the proposed activities are being implemented or are moving closer to the implementation phase. Fishery habitat restoration measures under the authorizing legislation may 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 essentially be complete by FY 2032, pending the availability of appropriations. Habitat enhancement, acquisition activities, and on-reservation project work are expected to continue for some time.

Recently completed activities include ten feasibility basin conservation plans. The Project is working on water conservation planning application submissions for two irrigation districts and reviewing the proposed projects with the YRBWEP Conservation Advisory Group. Three large conservation projects are currently in the design or implementation phase as a result of funding agreements among the irrigation districts, Washington State Department of Ecology (Ecology), and Reclamation. Construction of the Sunnyside Division Board of Control (SDBOC) Phase I began in 2004 and was completed in FY 2013. Implementation of SDBOC's Phase II water conservation plan began in FY 2009 with the American Recovery and Reinvestment Act funds. As a result, a significant portion of the SDBOC Phase II conservation implementation plan was completed in FY 2012. In FY 2012, Reclamation resumed construction of the SDBOC Phase II conservation implementation plan with an agreement through FY 2017 and in FY 2015 a subsequent agreement was signed to continue funding implementation of Phase II through FY 2020. Supplemental agreements are scheduled to fund SDBOC Phase II over a 20-year period, with completion scheduled for 2032. Construction of the Benton Irrigation District project was started in FY 2009 and completed in FY 2016. Reclamation entered into an agreement in FY 2013 with Ecology and the Roza Irrigation District to begin construction of a re-regulation reservoir as identified in their conservation feasibility study. The construction of the re-regulation reservoir was completed in FY 2017. Water acquisition target goals and deadlines set forth in the authorizing legislation were met ahead

of schedule. The Project has acquired nearly 2,000 acres of fish and wildlife habitat. Enhancement and habitat restoration activities are underway.

On-reservation Tribal studies for water supply system modifications and improvements are complete and the Secretary of the Interior (Secretary) has certified the Satus Creek improvements are consistent with the water conservation objective of the legislation. In 2016, a P.L. 638 contract was awarded to the Yakama Nation to begin funding design and implementation of the Satus Creek improvements. Implementation of the Satus Creek improvements are expected to take nine years. The 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. In 2017, a P.L. 638 contract was awarded to the Yakama Nation to begin an irrigation demonstration project authorized under the Title XII of P.L. 103-434, Sec. 2014. A study is required to determine parameters, scope, and economic feasibility of a new agricultural program enterprise on the Yakama Reservation in the Ahtanum unit. A consultant selection and approval by the Tribal council is expected in FY 2019 for this study.

Tributary improvements to the Teanaway River are complete and the land and water acquisitions on Taneum Creek is 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 of more than 100 redds per year in good water years. Taneum Creek improvements have removed barriers and improved 28 miles of critical habitat for migrating fish to access. In 2013, a tributary enhancement plan was completed for Manastash Creek and implementation of enhancement activities to increase instream flows are ongoing. In 2015, Reclamation entered into an agreement with Kittitas County and Ecology to conduct a tributary assessment for the Wilson, Naneum, and Cherry Creek systems. The Wilson, Naneum, and Cherry assessment were completed in 2017. In 2016, Reclamation entered into an agreement with Kittitas Reclamation District (KRD) and Ecology to implement water conservation projects identified in their conservation feasibility study. Water savings from the KRD project will enhance flows and improve fish habitat in several upper basin tributary streams. In 2017 and 2018, grants were provided to KRD to continue conservation work to allow additional flow to supplement flows in tributaries as appropriate. Levee setback and habitat restoration were 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. Tributary enhancements to Cowiche Creek have been implemented using Ecology and Bonneville Power Administration (BPA) funding. Teanaway River restoration was accomplished using BPA funding and a levee setback on the Yakima River was accomplished by the U.S. Army Corps of Engineers (USACE).

The Yakima River Basin Integrated Water Resource Management Plan (Integrated Plan) addresses water resources and ecosystem restoration improvements affecting fish passage and habitat, and agricultural, municipal, and domestic water supplies for the Yakima River basin located in central Washington. Several elements of the proposed plan are currently authorized. Other elements are funded by Ecology and are undergoing technical and environmental analysis. The Cle Elum pool raise, and the Cle Elum Dam fish passage final designs were completed in FY 2015. Reclamation and Ecology entered a Memorandum of Understanding in July 2014 to fund the construction of the Cle Elum Dam fish passage facilities. The first construction contracts for the fish passage facilities and pool raise were awarded in FY 2015. For the fish passage facilities, construction contracts have been awarded in FY 2016-2018 for the second, third, and fourth phases of the juvenile passage. The contracts for the adult passage will begin awarding in FY 2019, contingent on funding. For the pool raise project, the first shoreline protection contract was awarded in FY 2017 and the second contract was awarded in FY 2018.

Design data collection continues water reliability projects and operational improvements including the Kachess Drought Relief Pumping Plant, which is anticipated to be implemented by the irrigation districts. The State of Washington, in their biennial budgets, from FY 2013 to FY 2019, contributed approximately \$192 million towards furthering the Integrated Plan elements.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's
Water and Energy Management and Development	\$23,776,000	\$10,760,000
Request	\$23,776,000	\$10,760,000
Non-Federal	\$5,602,515	\$7,395,250
Prior Year Funds	\$0	\$0
Total Program	\$29,378,515	\$18,155,250
Prior Year Funds/Non-Federal/Other Federal	(\$5,602,515)	(\$7,395,250)
Total Reclamation Allotment	\$23,776,000	\$10,760,000

Total Cost Information*

	Total Estimated	Total to	FY 2019	FY 2020	Balance to
	Cost	9/30/18	Enacted	President's Budget	Complete
Reclamation	\$447,168,263	\$230,131,827	\$23,776,000	\$10,760,000	\$182,500,436
Adjustments 1/	\$164,092,589	\$95,439,971	\$5,602,515	\$7,395,250	\$55,654,853
Total	\$611,260,852	\$325,571,798	\$29,378,515	\$18,155,250	\$238,155,289

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

Cost Allocation and Methodology

Allocation	FY 2019 Enacted	FY 2020 President's Budget	
Fish and Wildlife	\$598,253,577	\$611,260,852	
Total ^{2/}	\$598,253,577	\$611,260,852	

² Total includes various study investigations costs and National Environmental Policy Act costs as authorized by P.L. 103-434.

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

METHODOLOGY: Authorizing legislation included costs at October 1997 price levels and included indexing language. The methodology brings the total cost up to October 2018 price levels.

APPROPRIATION CEILING: Total Federal appropriations authorized for all YRBWEP activities are \$447,168,263 (October 2018). The comparable Federal obligation is \$447,168,263 which is adequate to complete the Project as currently authorized.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development - Implementation - Water and Land Acquisition - Continues funding to purchase water 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 the 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 improving instream flows and acquiring land with high potential for improved habitat. Acquiring water and habitat through various methods, without affecting existing irrigation responsibilities, 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 awarding contracts. \$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 the potential for failure of the aging Wapatox Canal, to continue Reclamation's obligation to deliver irrigation water to Wapatox irrigators, and to 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 continued restoration on and potential acquisition of Union Gap, Wenas, and Heart K properties. Yakima and Kittitas Counties continue to work with numerous stakeholders to set back or remove levees along the Yakima River which creates potential areas for acquisition, restoration or enhancement. Yakima County is working with the USACE 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 \$1,700,000 located at the confluence of Wenas Creek and the Yakima River.

Irrigation District Implementation/Grants - Continues work associated with development and monitoring of irrigation district implementation grants. Continues work to complete water rights 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, as provided by their feasibility studies, and to monitor the effects on river diversions for the specific conservation measure. The Sunnyside grant is a major settlement feature between the State of Washington, the Yakama Nation, the Federal Government, and the Sunnyside Division of Reclamation's Yakima Project regarding the right to use water claims 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 to evaluate

success at achieving diversion reductions and instream flow increases. Reclamation's responsibility to continue its basic mission in delivering irrigation water to contract customers will remain.

\$2,110,250 Non-Federal - State of Washington (\$360,250) \$1,750,000

<u>Water Supply Reliability</u> - Continues analysis to increase the reliability of water supply for irrigation and fish by investigating alternatives, including inactive storage and operational improvements at existing reservoirs.

\$4,035,000

Non-Federal - State of Washington (\$2,835,000) \$1,200,000

Fish Passage - Continues operations and maintenance (O&M) of interim downstream fish passage facilities at Cle Elum Dam. O&M items include manipulation of stop logs and control gates to regulate passage flows, maintenance of electrical devices and electronic systems, repairs and maintenance to flume structures, and installation and removal of passive integrated transponder tag detectors. Continues construction of the permanent fish passage facilities at Cle Elum Dam and the fish reintroduction above the dam in accordance with the Yakama Nation settlement agreement. Continues addressing Washington State permit conditions that resolve disputes related to not providing fish passage at Keechelus Dam and Washington State fish passage issues involving anadromous salmon species listed under the Endangered Species Act (ESA). Implementation of passage features at the dams have the potential to increase populations of upper basin Mid-Columbia 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. Two species, Mid-Columbia steelhead and bull trout, are listed under the ESA.

\$7,060,000

Non-Federal - State of Washington (\$4,000,000) \$3,060,000

Conservation Advisory Group (CAG) - The Yakima River Basin Conservation Advisory Group was established to provide recommendations to the Secretary and the State of Washington on the structure and implementation of the Yakima River Basin Water Conservation Program. Continues coordination with the CAG as provided in the authorizing 1994 legislation.

\$6,000

<u>Toppenish Creek Corridor</u> - Continues work with the Yakama Nation on a P.L. 93-638 Indian Self Determination and Education Assistance Act (construction contract) for implementation of the Toppenish Creek corridor plan. The plan was developed by the Yakama Nation. \$344,000

<u>Wapato Irrigation Project Implementation</u> - 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. The Yakama Nation continues implementation of the irrigation demonstration project that began planning in 2017.

\$1,600,000

<u>Tributary Program</u> - Continues developing and funding projects to improve fish passage easements, instream flows, irrigation water supplies, and habitat conditions in the Yakima basin tributary streams. Continues grants with KRD for additional conservation water to supplement tributary flows. Continues to

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. \$800,000

Non-Federal - State of Washington

(\$200,000) \$600,000

Reclamation Request

\$10,760,000

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, and benefits to 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, Laguna, Senator Wash Dams, 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Percent of baseline acres infested with invasive plant species that are under control

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Control Invasive Plant Species:

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 2 to 10 days. Due to its prolific growth rate, it is considered one of the world's worst aquatic weeds. 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, the 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 and associated backwaters, as well as 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 not likely 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

Activity	FY 2019 Enacted	FY 2020 President's Budget	
Water and Energy Management and Development	\$1,183,000	\$1,125,000	
Facility Operations	\$19,917,000	\$20,632,000	
Facility Maintenance and Rehabilitation	\$3,661,000	\$2,157,000	
Request	\$24,761,000	\$23,914,000	
Non-Federal ^{1/}	\$719,000	\$719,000	
Prior Year Funds	\$811,068	0	
Total Program	\$26,291,068	\$24,633,000	
Prior Year Funds/Non-Federal	(\$1,530,068)	(\$719,000)	
Total Reclamation Allotment	\$24,761,000	\$23,914,000	

¹/Includes the amount of contributions from Southern Nevada Water Authority for the fiscal year indicated, 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. Also, includes non-Federal contributions relating to water districts portions of grants.

WORK PROPOSED FOR FY 2020:

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. \$1,275,000

Non-Federal: Various (\$150,000)

Subtotal, Water and Energy Management and Development

\$1,125,000

Facility Operations - Continues compliance with Federal and State regulations for the operations and management of the Colorado River. Continues 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.

\$1,107,000

Continues operations and maintenance of facilities including Imperial, Laguna, Senator Wash Dams 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 Yuma Area Water Management System and River Telemetry systems that provide real time data to support river operations. Continues efforts to identify non-contract users of Colorado River water as a means to conserve the water supply. Continues efforts to enhance 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. Continues efforts to collect and analyze sediment samples. \$6,594,000

Non-Federal: Southern Nevada Water Authority (\$569,000)

\$6,025,000

Continues activities to manage land along the Colorado River that is used to maintain the river and associated facilities. Activities include rights-of-way, 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.

\$1,188,000

Provides Information Technology (IT) related resources and services to administer, support, and manage the Yuma Area Water Management System (YAWMS) and Supervisory Control and Data Acquisition (SCADA) system. YAWMS/SCADA provides the central monitoring and control of wells, canal diversion/return facilities, and retention basins throughout the Yuma, Arizona area. Services provided include the purchase, installation, support, and contractual/license arrangements for IT resources, system and network administration, database administration, IT security activities, program management, and programming services. \$364,000

Continues routine operations and maintenance of the Lower Colorado River System. Activities include operations and 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 bridges. Continues routine operations and maintenance for Reclamation-owned bridges. There are approximately 278 bridges that traverse over the Colorado River and Reclamation-owned facilities. These bridges must be inspected, accounted for, and maintained. Bridge inspections occur on approximately 30 percent of these bridges annually.

\$3,143,000

Continues sediment control along the river and within settling basins to ensure efficient water delivery to the United States and to Mexico. This activity includes routine maintenance such as 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. \$2,226,000

Continues with routine operations and maintenance of Yuma, Laguna, and Ehrenberg facilities and grounds including warehouse and heavy equipment shops. Routine operations and maintenance includes heating and air conditioning, electrical, structural, security, plumbing systems, vehicle parking structures, roads, storm water run-off, fire protection, wiring systems, telephone systems, and lab equipment. Ensures security is maintained through appropriate lighting, fence lines, video surveillance systems and gate structures. Continues to pursue green initiatives by completing design activities and converting selected areas of the Yuma Area Office campus turf areas to xeriscaping, which will reduce maintenance costs and result in water savings.

\$1,731,000

Continues routine operations and maintenance of drainage wells and conveyances to recover and manage groundwater levels, to include sediment removal, gate and concrete repairs, and pump repairs. Continues funding operation, maintenance and upgrade activities that are necessary for aging wellfields. 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 Yuma area during winter months; a multi-billion-dollar crop. Rising aquifers also negatively impact Yuma County residents and businesses as high groundwater levels threaten building foundations, septic tanks, and underground pipelines.

§4,848,000

Subtotal, Facility Operations

\$20,632,000

Facility Maintenance and Rehabilitation -. Provide management and oversight of the Major Rehabilitation and Replacement's (MR&R) annual reporting requirement. Conduct quarterly review meetings to identify and prioritize new MR&R opportunities. Finalize the Lower Colorado MR&R Activities Spreadsheet List. "Additional Funding for Ongoing Work" provided by Congress in FY 2019 was allocated in part for installation of fire protection panels and updated alarm system, as well as the installation of upgraded technology for the Yuma Desalting Plant chlorine alarms.

\$2,157,000

Subtotal, Facility Maintenance and Rehabilitation

\$2,157,000

Reclamation Request

\$23,914,000

Table of Contents Bureauwide Section

Activity or Project	Page
Budget Summary Table	BW-02
Overview	BW-03
Dam Safety Program	BW-08
Safety Evaluation of Existing Dams	BW-08
Initiate Safety of Dams Corrective Action	
Department of the Interior Dam Safety Program	BW-11
Emergency Planning and Disaster Response Program	BW-15
Endangered Species Recovery Implementation Program	BW-18
Environmental Program Administration	
Examination of Existing Structures	BW-22
General Planning Activities	BW-25
Land Resources Management Program	BW-27
Miscellaneous Flood Control Operations	BW-33
Native American Affairs Program	BW-35
Negotiation and Administration of Water Marketing	BW-38
Operations and Program Management	BW-40
Power Program Services	BW-42
Public Access and Safety Program	
Reclamation Law Administration	BW-47
Recreation and Fish and Wildlife Program Administration	
Research and Development, Desalination and Water Purification Program	
Research and Development, Science and Technology Program	
Site Security	BW-58
WaterSMART Program	BW-62

Bureauwide FY 2020 Budget Summary (\$000)

		(\$000) FY 2020 President's Budget							
Project	FY 2019 Enacted	Water & Energy	Land Management	Fish & Wildlife	Facility Operations	Facility Maintenance	FY 2020 Request	Other Fed/ Non-Fed	Total Program
Dam Safety Program									
Safety Evaluation of Existing Dams	20,284	-	-	-	-	19,284	19,284	-	19,284
Initiate Safety of Dams Corrective Action	71,000	-	-	-	-	72,187	72,187	-	72,187
Department of the Interior Dam Safety Program	1,300	-	=	-	-	1,300	1,300	-	1,300
Emergency Planning and Disaster Response Program	1,300	-	-	-	1,250	-	1,250	-	1,250
Environmental Program Administration	1,844	-	-	1,523	-	-	1,523	-	1,523
Examination of Existing Structures	9,123	-	-	-	2,635	6,714	9,349	-	9,349
General Planning Activities	2,000	2,132	-	-	-	-	2,132	-	2,132
Land Resources Management Program	10,684	-	10,060	-	-	-	10,060	-	10,060
Miscellaneous Flood Control Operations	980	-	-	-	832	-	832	-	832
Native American Affairs Program	11,685	11,685	-	-	-	-	11,685	-	11,685
Negotiation and Administration of Water Marketing	2,462	2,308	-	-	-	-	2,308	-	2,308
Operation and Program Management	3,641	922	-	_	1,291	416	2,629	-	2,629
Power Program Services	2,500	2,121	-	-	307	-	2,428	-	2,428
Public Access and Safety Program	806	646	-	-	206	-	852	-	852
Reclamation Law Administration	2,148	2,078	-	-	-	-	2,078	-	2,078
Recreation and Fish and Wildlife Program Administration	6,497	-	407	2,842	-	-	3,249	-	3,249
Research and Development									
Desalination and Water Purification Program	19,803	1,475	-	-	1,150	-	2,625	-	2,625
Science and Technology Program	16,514	11,014	-	-	-	-	11,014	-	11,014
Site Security Activities	26,220	-	-	-	24,243	12,116	36,359	16,616	52,975
WaterSMART Program									
WaterSMART Grants	34,000	10,000	-	_	-	-	10,000	-	10,000
Cooperative Watershed Management	2,250	250	-	-	-	-	250	-	250
Water Conservation Field Services Program	4,179	1,750	-	-	-	-	1,750	-	1,750
Basin Studies	5,200	2,000	-	-	-	-	2,000	-	2,000
Title XVI - Water Recl and Reuse Program	58,617	3,000	_	-	-	-	3,000	-	3,000
Drought Response	9,000	2,901	_	-	-	-	2,901	-	2,901
WaterSMART Subtotal		19,901	-	-	-	-	19,901	-	19,901
Subtotal - Water and Related Resources		54,282	10,467	4,365	31,914	112,017	213,045	16,616	229,661

BUREAUWIDE FY 2020 OVERVIEW

FY 2019	FY 2020 BUDGET FOR WATER AND RELATED RESOURCES								
Enacted	Water &	Land	Fish &	Facility	Facility	Total			
	Energy	Management	Wildlife	Operations	Maintenance	Program			
\$324,037,000	\$54,282,000	\$10,467,000	\$4,365,000	\$31,914,000	\$112,017,000	\$213,045,000			

The Bureau of Reclamation FY 2020 Request for the Bureauwide programs for Water and Related Resources totals \$213.0 million. Reclamation funds 17 programs which are formulated at a bureauwide level. An overview of some of these programs follows.

Dam Safety Program – <u>Planned Accomplishments in 2020</u> include ongoing safety of dam's modification activities at Altus Dam, Boca Dam, Box Butte Dam, Bull Lake Dam, Folsom Dam, and Steinaker Dam. Begins planned modifications at Heart Butte Dam and Hyrum Dam. Preconstruction and project formulation activities are planned for several additional dams. Actual projects and funding amounts may be modified and are subject to final review and approval and identification of risk and needs.

<u>Planned Accomplishments in 2019</u> include ongoing safety of dam modification activities at Altus Dam, Box Butte Dam, Folsom Dam, Hyatt Dam, and Stampede Dam. Begins planned modifications at Boca Dam, Bull Lake Dam, Howard Prairie Dam, Hyrum Dam, and Steinaker Dam. Preconstruction and project formulation activities are planned for several additional dams. Actual projects and funding amounts may be modified and are subject to final review and approval and identification of risk and needs.

<u>Accomplishments in 2018</u> include ongoing safety of dam modification activities at Altus Dam, Box Butte Dam, Folsom Dam, Hyatt Dam, and Stampede Dam. Began planned modifications at Bull Lake Dam, Howard Prairie Dam, and Steinaker Dam and preconstruction and project formulation activities for several additional dams.

Native American Affairs Program – <u>Planned Accomplishments in 2020</u> provides support to the Department-wide Indian Water rights initiatives, studies and analyses 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 settlement negotiations and implementation to develop the most cost-effective options for reaching settlement and meeting tribal trust responsibilities. Involvement on Indian water rights settlement negotiation and implementation include:

- (1) funding for Reclamation's involvement on 20 Federal water rights negotiation teams, especially with the Kerr-McGee, Hualapai, Navajo-Utah, Tule River, Umatilla, and Confederated Salish and Kootenai Tribes negotiation teams;
- (2) funding for Reclamation's involvement on 23 Federal water rights settlement implementation teams, including continued support of a broad array of Reclamation's activities associated with recent water rights settlements (Blackfeet, Taos, White Mountain Apache, Crow, and Aamodt settlements) for which the settlement acts did not provide full funding for Reclamation involvement.

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, and groundwater quality and contamination studies.

<u>Planned Accomplishments in 2019</u> include support for 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 provide additional technical assistance to the Kerr-McGee, Hualapai, Navajo-Utah, Tule River, Umatilla, and Fort Belknap negotiation teams 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 (Blackfeet, White Mountain Apache, Crow, Taos, and Aamodt settlements) as the settlement acts did not fully fund all of Reclamation's activities, and technical assistance to Tribes.

<u>Accomplishments in 2018</u> included providing technical assistance to Tribes including but not limited to: water resource monitoring (2 projects), domestic water system improvements (10), water resource management improvements (4 projects), training (1 project), studies and assessments (2 studies), and irrigation efficiency improvements (5 projects).

Research and Development - <u>Planned Accomplishments in 2020</u> for the Science and Technology (S&T) Program include:

- (1) funding approximately 125 Reclamation-led research and development projects to address Reclamation's technical obstacles in water infrastructure, power and energy, environmental compliance issues with water delivery and management, developing new supplies, water operations and planning;
- (2) partnering with Federal and non-Federal entities to complete previously funded water and power technology prize competitions addressing difficult challenges in infrastructure management, environmental compliance and water availability;
- (3) continuing to lead and coordinate Reclamation activities under Federal technology transfer authorities; and
- (4) deploying program products to Reclamation end-users, customers, stakeholders and the general public through outreach, dissemination and training.

The program will continue to prioritize research to address the impacts of invasive zebra and quagga mussels on water infrastructure and operations, as well as research to eradicate mussels from open water bodies. The program will also continue to support the Open Water Data Initiative (OWDI) to make Reclamation's water and water-related data more easily accessible, building on 2016-2019 development efforts to build more-effective one-stop data portals serving the private sector and public. Activities in 2020 will include enhancement and operation of the Reclamation Information Sharing Environment (RISE), which will publish a large variety of water and water-related data from Reclamation's five western U.S. regions.

The Desalination and Water Purification Research (DWPR) Program planned accomplishments include funding approximately five new laboratory research studies, one continuing pilot scale project, and two new pilot scale testing projects focusing on innovative new approaches to increasing water supplies via advanced water treatment and on the reduction of cost, energy and environmental impacts of desalination and water treatment. It also 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 pilot-testing and full-scale testing activities. Reclamation will also continue to pursue opportunities to fund innovative new research competitively, as well as continue coordinating and partnering with other Federal and non-Federal entities that fund and do work in the area of desalination and water treatment.

<u>Planned Accomplishments in 2019</u> – for the Science and Technology (S&T) Program includes funding approximately 180 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 to water infrastructure, power and energy, environmental compliance issues with water delivery and management, developing new supplies, and water operations and planning. This portfolio includes approximately 20 projects to address the impacts of invasive zebra and quagga mussels on water infrastructure and operations, as well as research to advance prize competition winning solution on eradication of mussels from open water bodies (see Accomplishments 2018). In the area of technology prize competitions, the program is planning to launch six new competitions, including: Sediment Removal Techniques for Reservoir Sustainability, Lowering the Cost of Continuous Streamflow Monitoring, Improving Fish Exclusion from Water Diversions and Intakes, Prevent Corrosion of Hydraulic Steel Structures - Stage 2, More Water Less Concentrate - Stages 2 and 3, and Sub-seasonal Climate Forecast Rodeo 2. In support of the OWDI, 2019 activities are focused on developing and launch of RISE, which will incorporate the Reclamation Water Information System (RWIS) and also publish other Reclamation water-related data (e.g., hydropower, infrastructure assets, and environmental compliance).

The DWPR Program planned accomplishments include funding approximately nine laboratory research studies, ten small-scale project pilot scale projects, and one full-scale testing pilot focusing on innovative new approaches to increasing water supplies via advanced water treatment and on the reduction of cost, energy and environmental impacts of desalination and water treatment. It also 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, NM. Reclamation will also continue to pursue opportunities to fund innovative new research competitively, as well as continue coordinating and partnering with other Federal and non-Federal entities that fund and do work in the area of desalination and water treatment.

Accomplishments in 2018 included the S&T Program funding 147 research and development projects focused on finding solutions to issues facing Reclamation water and power managers and their stakeholders. This portfolio includes over 20 projects addressing challenges associated with mitigating the impacts of invasive zebra and quagga mussels on water infrastructure and operations. A listing of funded projects is available at www.usbr.gov/research. The program also supported technology prize competitions addressing challenges in water availability, reliable infrastructure, and environmental compliance. Four prize competitions were launched including: Eradication of Invasive Mussels in Open Water - Stage 1, Detecting Leaks and Flaws in Water Pipelines - Stage 1, Pathogen Monitoring for Potable Water Reuse - Stage 1, and Powering Electronic Instruments on a Rotating Shaft. In support of the OWDI, the program continued to enhance and operate RWIS, which provides citizens and the private sector easier and enhanced access to reservoir water data from 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 include awarding a total of nine new laboratory research studies, and seven new pilot-scale projects, for a total of 16 new cooperative agreements with academia, private sector, and non-profit organizations. The selection of new awards was highly competitive, as the program received over 73 eligible proposals from applicants in 26 states.

Site Security – <u>Planned Accomplishments in 2020</u> include end of life cycle replacement of vehicle barriers at Glen Canyon Dam, funding of security improvements to the Hoover Dam entry inspection station and end of life cycle replacement of electronic security systems in multiple locations.

<u>Planned Accomplishments in 2019</u> include end of life cycle replacement of vehicle barriers at Shasta Dam; installation of permanent solution for top-of-dam pedestrian safety measures at Hoover Dam;

installation of security system improvements at ten PN Region dams; and funding security improvements required for the Boca Dam project.

<u>Accomplishments in 2018</u> included end of life cycle replacement of vehicle barriers at Hoover and a portion of Shasta Dams, complete design of a modern vehicle inspection station and permanent solution for top-of-dam pedestrian safety measures at Hoover Dam; purchase of new ballistic rated guard booths for Grand Coulee Dam; installation of vehicle barriers at four dam sites; and installation of a new alarm system at New Melones Dam.

WaterSMART – Planned Accomplishments in 2020 include providing WaterSMART Grants as cost-shared funding to carry out on-the-ground water management improvements, including projects that save water; mitigate conflict risk in areas at a high risk of water conflict; and accomplish other benefits to increase the reliability of existing supplies. In addition, some projects may also result in water delivery improvements that facilitate future on-farm improvements, which can be carried out with the assistance of the United States Department of Agriculture, Natural Resources Conservation Service to accomplish coordinated water conservation improvements. Projects that include multiple benefits are given the greatest consideration for funding. Through WaterSMART Grants, funding is also used to support small-scale water efficiency projects (up to \$75,000 in Federal funding for each project) that have been identified through previous planning efforts. Reclamation has developed a streamlined selection and review process to reflect the small-scale nature of these projects. Additionally, WaterSMART Grants funding is used to support stakeholder efforts to develop water marketing strategies to increase water supply reliability. Assistance will be available to states, tribes, irrigation and water districts, and other entities with water or power delivery authority.

Basin Study Program funding will support baseline assessments of risks and impacts to water supply and demand; the development of applied science tools, data and guidance needed to carry out Reclamation's mission; site-specific pilots; and will continue to support collaborative efforts to evaluate and address imbalances between supply and demand, including Basin Studies and related follow-on activities.

Reclamation will provide funding for water reclamation and reuse research through the Title XVI Program. Projects will be identified for funding through a competitive process using criteria focused on reducing existing diversions or addressing specific water supply issues in a cost-effective manner and meeting other program goals. A small amount of 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.

Reclamation will continue to implement the Cooperative Watershed Management Program. Funding will be used to support watershed groups, including outreach to ensure that the groups are representative of the stakeholders within the watershed, the development of watershed restoration plans to identify critical water issues related to water quantity and quality, and scoping and planning potential on-the-ground projects. Funding may also be used to implement on-the-ground watershed management projects. Funding will be allocated on a competitive basis using established criteria.

Reclamation will continue to implement the Drought Response Program that was initiated in FY 2015. Funding for planning and implementation actions will be allocated through a competitive selection process that emphasizes involvement from multiple stakeholders and cost-sharing from non-Federal sponsors.

Through the Water Conservation Field Services Program (WCFSP), Reclamation will continue to make cost-shared financial assistance available on a competitive basis at the area and regional office levels for development of water conservation plans and design of water management improvements, identifying water management improvements through System Optimization Reviews, and improving the

understanding of water conservation technologies through demonstration activities, as well as technical assistance from Reclamation staff.

<u>Planned Accomplishments in FY 2019</u> include providing WaterSMART Grants and funding to 45-50 new water and energy efficiency projects, along with 10-15 projects to develop water marketing strategies and 65-75 small-scale water efficiency improvements.

Reclamation will conduct consistent baseline water supply and demand analyses; develop applied science tools, data and guidance to carry out Reclamation's mission; conduct pilot studies to identify possible improvements to western reservoir operations; and continue support of collaborative efforts to address imbalances between supply and demand, including Basin Studies and follow-on activities.

Through the Cooperative Watershed Management Program, Reclamation anticipates providing funding for 6-10 on-the-ground watershed management projects. Additionally, Reclamation will post a funding opportunity announcement seeking proposals for projects to establish or further develop a watershed group, including funding for outreach to ensure that the groups are representative of the stakeholders within the watershed, the development of the watershed restoration plans to identify critical water issues related to water quantity and quality, and scoping and planning potential on-the-ground projects. Reclamation anticipates providing funding for the establishment or further development of 15-20 watershed groups.

Reclamation anticipates providing funding to approximately eight to fourteen water reclamation and reuse projects, as well as three to twelve water 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.

Through the Drought Response Program, Reclamation expects to provide funding for the implementation of 10-15 drought resiliency projects.

Through the WCFSP, Reclamation will provide cost-shared funding for development of water conservation plans, design of water management improvements, identification of water management improvements through System Optimization Reviews, and improving the understanding of water conservation technologies through demonstration activities, as well as technical assistance from Reclamation staff.

<u>Accomplishments in FY 2018</u> included awards for 54 new WaterSMART Water and Energy Efficiency Grants and 75 ongoing, previously-selected projects; 58 Small-Scale Water Efficiency Projects; and seven Water Marketing Strategy Grants.

Reclamation also completed review of applications under the Title XVI Program to allocate \$54M in funding, including \$20 million for projects authorized under the WIIN Act. Applications for WIIN Desalination Construction Projects were also reviewed to allocate \$18 million in funding.

As part of Reclamation's Drought Response Program, Reclamation provided \$260,000 to two entities for the development of comprehensive drought plans and \$8.3 million for 15 drought resiliency projects.

Through the Cooperative Watershed Management Program, Reclamation provided \$2.6 million in funding to 27 watershed groups to establish a new group or to further develop an existing group.

Reclamation continued five reservoir operations pilot studies to identify possible improvements to western reservoir operations.

DAM SAFETY PROGRAM

LOCATION: The 17 Western States in Reclamation's Service Area. Work may be performed for other Federal entities on a reimbursable basis throughout the United States.

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 three programs: The Safety Evaluation of Existing Dams (SEED), Initiate Safety of Dams Corrective Action (ISCA) Program and the Department of the Interior (DOI) Dam Safety Program. The SEED and ISCA Programs identify and evaluate safety of dams issues and implement modifications, if warranted, to reduce associated risks to the public. In addition, Reclamation manages the DOI Dam Safety Program, which includes facilitation and guidance to other departmental agencies for their dam safety programs.

Reclamation manages 492 dams throughout the 17 Western States. The Dam Safety Program has identified 363 high and significant hazard dams at 242 facilities, which 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)** program provides for performance monitoring, examinations, analyses, field data investigations, and technical studies and development activities on an ongoing or recurring basis for the dams in the program. Program management activities are also included. Public safety risks associated with dam safety issues are investigated and assessed 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

(October 2015 price level). Expenditure of funds requires 15 percent repayment by project beneficiaries in accordance with the Reclamation Safety of Dams Act, as amended.

All Safety of Dams (SOD) modifications are funded through the ISCA sub-task. Modification approvals are managed by the Dam Safety 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 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:

Altus Dam, W. C. Austin Project, 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. 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. Construction activities are expected to be substantially complete in FY 2019. Project closeout activities will continue through FY 2020.

Boca Dam, Washoe Project, California

The dam safety issues at Boca Dam include the potential deformation of the dam or dike resulting in failure or failure along the spillway control structure during an earthquake. The risk assessment indicates the dam safety risks associated with these potential failure modes exceeds Reclamation public protection guidelines for risk reduction actions. Proposed modifications include construction of a downstream foundation key trench, berm, filter, as well as strengthening of the spillway control structure walls. Construction is scheduled to start in FY 2019. Substantial completion of construction activities is scheduled for FY 2021.

Box Butte Dam, Mirage Flats Project, 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. Substantial completion of construction is scheduled for FY 2019. Project closeout will continue through FY 2021.

Bull Lake Dam, Pick-Sloan Missouri Basin Project, Riverton Division, 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. The construction contract was awarded in FY 2018 and substantial completion of construction activities is scheduled for FY 2021.

Folsom Dam, Central Valley Project, 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 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. Project close out activities are expected to continue through FY 2021.

Steinaker Dam, Central Utah Project, Vernal Unit, Utah

The dam safety issues at Steinaker Dam are associated with internal erosion potential failure modes at the right abutment-embankment contact zone. The risk assessment indicates the dam safety risks associated with these potential failure modes exceed Reclamation's public protection guidelines for risk reduction actions. Proposed modifications include foundation improvements to the upstream right abutment of the dam, flattening the upstream slope of the right abutment seepage blanket to improve static and seismic stability, extending the outlet works conduit and construction of a new outlet works intake structure. The Modification Report for the proposed modification was transmitted to Congress in FY 2018. Reclamation also awarded a construction contract in FY 2018. Substantial completion of construction activities is scheduled for FY 2020. Project closeout activities will continue into FY 2021.

Planned FY 2020 Corrective Action Construction Starts:

Actual projects and funding amounts may be modified and are subject to final review and approval and identification of risk and needs.

Heart Butte Dam, Pick-Sloan Missouri Basin Project, Heart Butte Unit, North Dakota

The dam safety issues are associated with internal erosion potential failure modes. The risk assessment indicates the dam safety risks associated with these potential failure modes exceed Reclamation's public protection guidelines for risk reduction actions. Proposed modifications include construction of a filter and drainage system around the spillway/outlet works conduit. Reclamation anticipates the Commissioner's authorization for construction of the proposed modifications in FY 2019.

Hyrum Dam, Hyrum Project, Utah

The dam safety issues at Hyrum Dam are associated with hydrologic potential failure modes. The risk assessment indicates the dam safety risks associated with these potential failure modes exceed Reclamation's public protection guidelines for risk reduction actions. Proposed modifications include construction of a spillway along a new alignment; demolition, removal, and burial of the existing spillway; and foundation modifications to improve seismic stability of the spillway.

Dams with Preconstruction Activities continuing in FY 2020:

B.F. Sisk Dam, Central Valley Project, California

Pre-construction activities, including project approval, environmental analysis, and final design will continue at B.F. Sisk Dam. The project scope and cost are expected to be similar to the Safety of Dams modifications at Folsom Dam.

Conconully Dam, Okanogan Project, Oregon

The dam safety issues at Conconully Dam are associated with the potential deformation of the dam during an earthquake, resulting in overtopping or erosion failure of the dam. The risk assessment indicates the dam safety risks associated with these potential failure modes exceeds Reclamation public protection

guidelines for risk reduction actions. The Corrective Action Study to identify appropriate risk reduction actions is expected to start in FY 2019.

El Vado Dam, Middle Rio Grande Project, New Mexico

The dam safety issues are associated with erosion potential failure modes at both the service spillway and auxiliary spillway, as well as internal erosion potential failure modes through the embankment and left abutment of the dam. The risk assessment indicates the dam safety risks associated with these potential failure modes exceed Reclamation's public protection guidelines for risk reduction actions. The Corrective Action Study to identify appropriate risk reduction actions is in progress.

Fresno Dam, Milk River Project, Montana

The dam safety issues are associated with internal erosion potential failure modes through the embankment. The risk assessment indicates the dam safety risks associated with these potential failure modes exceed Reclamation's public protection guidelines for risk reduction actions. The Corrective Action Study to identify appropriate risk reduction actions is in progress.

Kachess Dam, Yakima Project, Washington

The dam safety issues are associated with internal erosion along the outlet works conduit. The risk assessment indicates the dam safety risks associated with these potential failure modes exceed Reclamation's public protection guidelines for risk reduction actions. The Corrective Action Study to identify appropriate risk reduction actions is in progress.

Scoggins Dam, Tualatin Project, Oregon

The dam safety issues at Scoggins Dam are associated with the potential deformation of the dam during an earthquake, resulting in overtopping or erosion failure of the dam. The risk assessment indicates the dam safety risks associated with these potential failure modes exceeds Reclamation public protection guidelines for risk reduction actions. The Corrective Action Study to identify appropriate risk reduction actions is in progress.

It is anticipated the following dams will have decisions regarding the need for potential risk reduction activities made in FY 2020 and FY 2021:

American Falls Dam, Minidoka Project, ID
Deadwood Dam, Boise Project, ID
Granby Dam, Colorado-Big Thompson Project, CO
Green Mountain Dam, Colorado-Big Thompson Project, CO
Ochoco Dam, Crooked River Project, OR
Seminoe Dam, Kendrick Project, WY
Sugar Loaf Dam, Fryingpan- Arkansas Project, CO
Tieton Dam, Yakima Project, WA
Unity Dam, Burnt River Project, Oregon

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

Departmental Manual and Secretarial Order No. 3048 assign 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 Working Group on Dam Safety and Security (WGDSS) to foster collaboration and efficiency in 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 and Enforcement. Reclamation provides a WGDSS program manager and technical support for WGDSS initiatives. The Dam Safety Officer will continue to perform independent oversight, review, and policy development activities for the WGDSS.

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 authority 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. This law also increased the Commissioner's authority to \$20 million.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 5: Protecting Our People and the Border

Goal #4: Provide science to safeguard communities from natural hazards

Measure: Number of high- and significant-hazard dams modified based upon applied science and engineering to reduce risk to the public

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
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	\$19,284,000
Initiate Safety of Dams Corrective Actions	\$71,000,000	\$72,187,000
Request	\$92,584,000	\$92,771,000
Prior Year Funds	\$21,881,941	\$0
Total Program	\$114,465,941	\$92,771,000
Prior Year Funds/Non-Federal	(\$21,881,941)	\$0
Total Reclamation Allotment	\$92,584,000	\$92,771,000

Safety of Dams Modifications Currently Underway

Facility Maintenance and Rehabilitation	FY 2019 Enacted	FY 2020 President's Budget
GP – W.C Austin Project, Altus Dam, OK	\$4,500,000	\$1,000,000
MP – Washoe Project, Boca Dam, CA	\$19,900,000	\$1,500,000
GP – Mirage Flats Project, Box Butte Dam, NE	\$2,500,000	\$1,200,000
GP – P-SMBP, Riverton Division, Bull Lake Dam, WY	\$8,500,000	\$8,500,000
MP – CVP, Folsom Unit, Folsom Dam, CA	\$4,000,000	\$6,000,000
UC - Central Utah Project, Steinaker Dam	\$10,000,000	\$8,000,000
GP – PSMPB, Heart Butte Dam, ND	\$1,000,000	\$5,500,000
UC – Hyrum Project, Hyrum Dam, UT	\$1,000,000	\$13,000,000
MP – CVP, B.F. Sisk Dam, CA	\$8,000,000	\$20,000,000
PN – Okanogan Project, Conconully Dam, WA	\$300,000	\$1,000,000
UC – Middle Rio Grande Project, El Vado Dam, NM	\$1,000,000	\$1,000,000
GP – Milk River Project, Fresno Dam, MT	\$1,000,000	\$2,000,000
PN –Yakima Project, Kachess Dam, WA	\$800,000	\$1,000,000
PN – Tualatin Project, Scoggins Dam, OR	\$2,000,000	\$2,000,000
PN – Rogue River Basin Project, Howard Prairie Dam, OR	\$3,800,000	\$0
MP – Washoe Project, Stampede Dam, CA	\$2,000,000	\$50,000
Other Construction and Preconstruction Dams	\$700,000	\$437,000
Total for Safety of Dams Modifications Currently Underway	\$71,000,000	\$72,187,000

WORK PROPOSED FOR FY 2020:

Facilities Maintenance and Rehabilitation - The funding request for the Dam Safety Program is \$92.771 million. The request allows Reclamation to address ongoing dam safety risk management activities at Altus Dam, OK: Boca Dam, CA; Box Butte Dam, NE, Bull Lake Dam, WY; Folsom Dam, CA; and Steinaker Dam, UT. SOD modification activities are scheduled to begin in FY 2020 at Heart Butte Dam, ND and Hyrum Dam, UT. Preconstruction and project formulation activities are planned on additional dams, including major planned modifications at B.F. Sisk Dam, CA and Scoggins Dam, OR, as well as Conconully Dam, OR, El Vado Dam, NM, Fresno Dam, MT, and Kachess Dam, WA. Funding levels for risk reduction actions are workload driven based on scope and needs of specific issues. The Safety Evaluation of Existing Dams (SEED) Program request of \$19.284 million identifies and evaluates Safety of Dams issues at Reclamation dams and recommends evaluation of modifications to reduce associated risks to the public when warranted. The DOI Dam Safety Program request of \$1.3 million includes funding for coordination and management of the program with Reclamation as the lead technical agency within the Department, and for ongoing work as lead in other Department of Interior Working Group on Dam Safety and Security issues. Actual projects and funding amounts may be modified and are subject to final review and approval and identification of risk and needs. \$92,771,000

Reclamation Request

\$92,771,000

EMERGENCY PLANNING AND DISASTER RESPONSE PROGRAM

LOCATION: The 17 Western States in Reclamation's service area.

DESCRIPTION/JUSTIFICATION: Reclamation's ability to prepare for and respond to emergencies at Reclamation dams, facilities, and offices, and for major disasters such as Hurricanes Harvey and Maria, 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, disaster response, 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. Reclamation commits significant effort and time overseeing devolution program activities, such as leading regular meetings with the Senior Executives with delegated authority of the Secretary of the Department and representatives of the Department's bureaus and offices, maintaining physical site attributes, acquiring and testing equipment, coordinating personnel and infrastructure logistics, preparing for annual national-level Continuity of Operations exercises, maintaining and updating contact information of the Devolution Team members in the automated mass notification system, coordinating events, and participating on the Department's Exercise Planning Team for the national level exercises.

- 2) Emergency Action 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 that the Emergency Action Planning Program programs 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 general emergency management doctrines and systems (e.g., National Incident Management System, 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 participate 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 and Department reporting in response to incidents and disasters. 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 serves as the Department's Principal Planner in the National Response Framework for Emergency Support Function #3, Public Work and Engineering, and in the National Disaster Recovery Framework for Infrastructure Systems. Reclamation has supported dozens of FEMA and USACE disaster operations since 1993. EPDRP also prepares Reclamation staff to respond to disasters at Reclamation facilities.

Department agencies can provide immediate emergency response, at the request of local government authorities, to protect human life, property, or the environment if the response would be impaired by the delay required to seek approval of senior officials, according to Department Manual 900, Chapter 1, Section 1.10. 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; U.S. Code Title 6 Subchapter II - Comprehensive Preparedness System; Executive Order 12656, Assignment of National Security and Emergency Preparedness Responsibilities; Executive Order 12472, Assignment of National Security and Emergency Preparedness Telecommunications Functions; PPD-2, Implementation of the National Strategy for Countering Biological Threats; HSPD-5, Management of Domestic Incidents; PPD-8, National Preparedness; PPD-40, National Continuity Policy; Department of the Interior, Departmental 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, Departmental Manual, Series: Special Programs, Part 753, Dam Safety and Security Program: Chapter 2: Program Requirements; Federal Guidelines for Dam Safety: 5 U.S.C. § 301, Departmental Regulations (Pub. L. 107-56, title X, Sec. 1016, Oct. 26, 2001, 115 Stat. 400; 42 U.S.C. § 5195c, Critical Infrastructure Protection Act of 2001, (Pub. L. 107-56, title X, Sec. 1016, Oct. 26, 2001, 115 Stat. 400.); Homeland Security Act of 2002 (Pub. L. 107-296, Sec. 2, Nov. 25, 2002, 116 Stat. 2140, 6 U.S.C. § 101), as amended and supplemented; 41 CFR § 101–20; 29 CFR §1910.38; Post Katrina Emergency Management Reform Act of 2006 (Pub. Law 109-295, 120 Stat. 1355).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 5: Protecting Our People and the Border

Goal #1: Ensure emergency preparedness & DOI law enforcement staffing addresses public safety risks **Measure:** Average Interior Readiness (I-READ) Index score for emergency preparedness across DOI Bureaus/Offices

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations		
Disaster Response, Emergency Notification Systems, and Emergency Planning at Dams	\$810,000	\$760,000
Continuity of Operations Program	\$490,000	\$490,000
Request	\$1,300,000	\$1,250,000
Non-Federal	\$0	\$0
Prior Year Funds	\$202,725	\$0
Total Program	\$1,502,725	\$1,250,000
Prior Year Funds/Non-Federal	(\$202,725)	\$0
Total Reclamation Allotment	\$1,300,000	\$1,250,000

WORK PROPOSED FOR FY 2020:

Facility Operation - Continues the oversight of the Continuity of Operations and Emergency Action Planning program activities, and ongoing exercises of the existing Continuity of Operations and Emergency Action Plans. Continues management of disaster response mission assignments, National Response Framework/National Disaster Recovery Framework requirements, secure communications and related activities, and the Emergency Notification System. Provides for Reclamation's oversight of the Department's devolution site and participation in a national-level Continuity of Operations exercises. Continues participation in Reclamation's National Critical Infrastructure Exercise program. Continues compliance with Departmental minimum training requirements for emergency management. \$1,250,000

Reclamation Request

\$1,250,000

Endangered Species Recovery Implementation Program – Reclamation Wide

LOCATION: The 17 Western States in Reclamation's Service Area

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. Programs are also funded to develop, implement and sustain actions that preserve, conserve, and recover endangered, threatened, proposed, and candidate species.

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 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. 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; 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: 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and activities

Measure: Percent of baseline acres infested with invasive plant species that are under control **Goal #3**: Foster partnerships to achieve balanced stewardship and use of our public lands

Measure: Number of non-DOI acres restored, including through partnerships

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Fish and Wildlife Management and Development	\$4,000,000	\$2,500,000
Enacted/Request	\$4,000,000	\$2,500,000
Non-Federal	\$0	\$0
Prior Year Funds	\$427,695	\$0
Total Program	\$4,427,695	\$2,500,000
Prior Year Funds/Non-Federal	(\$427,695)	\$0
Total Reclamation Allotment	\$4,000,000	\$2,500,000

WORK PROPOSED FOR FY 2020:

Fish and Wildlife Management and Development – Continues support of consultation activities and the implementation of Biological Opinion (BiOp) requirements on certain projects throughout Reclamation. Continues coordination with the National Oceanic and Atmospheric Administration Fisheries and the U.S. Fish and Wildlife Service on development of BiOps, 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. Continues land protection, habitat restoration, and other activities to benefit endangered and threatened species and critical habitats. Continues the acquisition of fee title and/or conservation easements on lands containing riparian, vernal pool, serpentine soil, valley grassland, and alkali scrub habitats. Continues the restoration of riparian, alkali scrub, serpentine soil, and other impacted habitats. Provides for the captive breeding and reintroduction of listed species to their historic habitats.

Continues plan and design of the Arizona Public Service Division Dam's fish passage structure. Continues annual winter flights and occupancy, reproductive assessment, helicopter surveys, nest watch activities, and participation on the Southwestern Bald Eagle Management Committee. Reclamation's continued support is critical to the implementation of the Arizona Bald Eagle Conservation Strategy and will serve to offset future project related impacts. Continues field data collection in accordance with the Flat-Tailed Horned Lizard Range-wide Management Study providing guidance for the conservation and management of sufficient habitat to maintain existing populations of the lizards. Continues work on activities to protect and create new habitat for the benefit of the southwestern willow flycatcher, yellowbilled cuckoo, and Yuma ridgeway's rail along the lower Colorado River, Gila River and San Pedro River's migratory route, establishing native riparian, wetland and aquatic areas in addition to providing educational programs to 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. Continues work with State and Federal agencies to reduce predation by non-native fishes on the endangered fish in the Virgin River. Continue implementation of conservation actions due to the spinedace and other listed aquatic species along with surveys to identify locations and feasibility of fish barriers in tributaries of the Little Colorado River.

Reclamation Request \$4,000,000

Environmental Program Administration

LOCATION: The 17 Western States in Reclamation's Service Area

DESCRIPTION/JUSTIFICATION: The program provides for the assessment, evaluation, study, and formulation of plans to ensure compliance with environmental law, policy, and initiatives. The program also provides for statutory and regulatory compliance in required records and data management, tracking, reporting, and public outreach and information. The program ensures continued legal operation of established Reclamation facilities and projects through programmatic management of environmental compliance documentation, programs, and monitoring to comply with the National Environmental Policy Act (NEPA) requirements. The program provides for the collection and analysis of data to defend legal positions and make recommendations relative to the conservation of endangered or threatened species in compliance with the Endangered Species Act (ESA), and for meeting requirements of the National Historic Preservation Act (NHPA).

AUTHORIZATION: P.L. 845 Clean Water Act, June 30,1948, 33 U.S.C. 1251-1376; Fish and Wildlife Coordination Act, August 12, 1958; 16 U.S.C. 668-668d Bald and Golden Eagle Protection Act of 1940, June 8, 1940; P.L. 86-523 as amended Archeological and Historic Preservation Act, June 27, 1960; P.L. 89-665 National Historic Preservation Act of 1966, October 15,1966; 54 U.S.C. 300101; P.L. 91-190, 42 U.S.C. 4321-4347 National Environmental Policy Act of 1969, January 1, 1970, as amended; Paleontological Resources Preservation Act of 2009, P.L. 111-11, Title VI, Subtitle D; Clean Air Act of 1970, 42 U.S.C. 7401; Executive Order 11593 Protection and Enhancement of the Cultural Environment, May 13, 1971; P.L. 93-205 Endangered Species Act of 1973, December 28, 1973, as amended; P.L 93-523, 42 U.S.C. 300f Safe Drinking Water Act, December 16, 1974; Executive Order 11988 Floodplain Management, May 24, 1977; Executive Order 11990 Protection of Wetlands, May 24, 1977; P.L. 95-341 American Indian Religious Freedom Act, August 11, 1978; P.L. 96-95 Archaeological Resources Protection Act of 1979, October 31, 1979; P.L. 97-95, Sec. 1539-1549; 7 U.S.C. 4201, et seq, December 22, 1981; P.L. 101-601 Native American Graves Protection and Repatriation Act, November 16, 1990; Executive Order 12898 Environmental Justice, February 11, 1994; 512 DM Chapter 2 Indian Trust Responsibilities, December 1, 1995; Executive Order 13007 Indian Sacred Sites, May 24, 1996; Executive Order 13175 Consultation and Coordination with Indian Tribal Governments, November 6, 2000; Executive Order 13186 Protection of Migratory Birds, January 10, 2001; P.L. 109-58 Federal Energy Policy Act of 2005, July 29, 2005; Department of the Interior National Environmental Policy Act Regulations 43 CFR Part 46; Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 CFR Parts 1500-1508; Executive Order 13423 Strengthening Federal Environmental, Energy, and Transportation Management, January 24, 2007; Executive Order 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 Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Fish and Wildlife Management and Development	\$1,844,000	\$1,523,000
Request	\$1,844,000	\$1,523,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$1,844,000	\$1,523,000
Prior Year Funds/Non-Federal	(\$0)	(\$0)
Total Reclamation Allotment	\$1,844,000	\$1,523,000

WORK PROPOSED FOR FY 2020:

Fish and Wildlife Management and Development - Continues administrative support, oversight, and management of NEPA, NHPA, and ESA processes and reviews. This includes review, coordination, and comment on NEPA and other environmental documents prepared by other Federal, State, or local agencies. Continues administrative support in the preparation and coordination of an annual Interagency Agreement with U.S. Fish and Wildlife Service under the Fish and Wildlife Coordination Act. Continues collection and analysis of data to support environmental compliance for NEPA, NHPA, and ESA projects, proposals, and activities. This data is used to analyze impacts, defend legal positions, and make recommendations based on the results of the environmental compliance. Continues to establish and monitor environmental commitments associated with this environmental compliance. Continues review and comment on all draft directives, audits, and data calls.

\$1,523,000

Reclamation Request

\$1,523,000

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 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 Standard Operating Procedures (SOP), 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. It is also under the program's purview to complete inspections and assign a facility reliability rating for project facilities with the exception of non-Reclamation operated and maintained associated facilities. The program also provides funding to update inundation maps based on appropriate failure modes and population at risk. The inundation maps are important to downstream communities in the event of dam failure or uncontrolled release.

In addition, the program provides procedures to implement and exercise Emergency Action Plans (EAPs) for Reclamation high or significant hazard dams. These EAPs provide timely and accurate notification to local authorities responsible for the evacuation of the public when potentially at risk from high operational or dam failure releases from Reclamation facilities. The program provides coordination of other emergency management activities, such as providing information to communities downstream of Reclamation facilities to assist them in the preparation of warning plans and plans specific to Reclamation dams.

Emergency Management funds will be used to help entities meet requirements of the new Response Level System; recent and emerging Emergency Management training mandates under Presidential Policy Directive 8; and, emerging changes in coordination, accomplishment, and use of inundation studies and mapping and other all-hazards and flood consequence study, downstream mitigation, and response planning. This will reduce the risk of high losses-of-life, high economic impacts of property destruction, and local industry disruptions due to Reclamation dam operation failures and floods. Activities are coordinated with other Federal, State, and local jurisdictions to ensure emergency preparedness and response to national and/or local incidents affecting Reclamation facilities. The program also works to prevent or control invasive species activities and their impacts to Reclamation facilities.

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902; P.L. 260, the Reclamation Project Act of 1939, August 4, 1939; Federal Guidelines for Dam Safety of June 25, 1979; P.L. 95-578, Reclamation Safety of Dams Act, as amended December 18, 2015; 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 Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$3,259,000	\$2,635,000
Facility Maintenance and Rehabilitation	\$5,864,000	\$6,714,000
Request	\$9,123,000	\$9,349,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$9,123,000	\$9,349,000
Prior Year Funds/Non-Federal/Other Federal	\$0	\$0
Total Reclamation Allotment	\$9,123,000	\$9,349,000

WORK PROPOSED FOR FY 2020:

Facility Operations – Continues funding for cyclical review, evaluation, and revision of EAPs and SOPs for safety and consistency. Continues to identify deficiencies and recommend corrective actions. Continues promoting efficient and safe operations of transferred Reclamation facilities, periodic emergency exercises, reviews and technical assistance, and classroom 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 and 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. Continues review of instrumentation schedules and reports in accordance with Reclamation policy, directives and standards.

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. Continues funding for 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 program management; structure and facility examinations; preparation and review of examination reports; preparation of inundation maps; and work to perform and review risk assessments. Continues inspections for early detection of potential failures, including data collection, instrumentation, examination, including pre-stressed concreate cylinder pipe (PCCP) installations and canal reaches located in urbanized areas, and program management to maintain integrity of Reclamation structures. Continues performance parameters review, report preparation, preparation and review of contractual documents, policies, regulations, inspections, and operation and maintenance recommendations.

Continues funding for periodic examination of fish passage and protective facilities, 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. These actions promote efficient and safe operation of Reclamation facilities. Continues funding for the Environmental Management System which evaluates an organization's apparent or potential impact to the environment or human health. Continues review and examination of high and significant hazard dams,

including participation in Comprehensive Facility Reviews; performance of Periodic Facility Reviews; bridge inspections; and examinations of normally inaccessible features (dives, climbs, and remotely-controlled video inspections). \$6,714,000

Reclamation Request

\$9,349,000

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, hydrologic 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 Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

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

Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$2,000,000	\$2,132,000
Enacted/Request	\$2,000,000	\$2,132,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$2,000,000	\$2,132,000
Prior Year Funds/Non-Federal	(\$0)	(\$0)
Total Reclamation Allotment	\$2,000,000	\$2,132,000

WORK PROPOSED FOR FY 2020:

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 Reclamation's

ability to identify and develop 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.

Ensures continuity of the skills needed to effectively plan for a wide range of activities within the context of changing social, economic, and environmental factors. Maintains and develops core planning capabilities and expertise critical to Reclamation's mission to provide significant benefits to decision-making processes. Ensures coordination with the regional asset managers to identify Major Rehabilitation and Replacement projects that require a planning study under current policies and directives.

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 Tribal Governments not funded by other programs.

Continues to establish, maintain, and promote partnerships and investments that are essential to optimize existing water supplies, including participation in ongoing programs and initiatives of other Federal, State, and local agencies, as well as with Tribal Governments. Continues the accomplishment of various water resource management initiatives, coordination on interstate and interregional activities, and review of data and reports from others that might affect Reclamation interests.

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 and area office locations. \$2,132,000

Reclamation Request

\$2,132,000

Land Resources Management Program

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: The Program provides land management and resources activities on Reclamation project lands. This Program provides for resource management planning studies which are used to determine future management and appropriate use of the lands within Reclamation's jurisdiction. This work includes liaison activities with cooperating land management entities and other administrative activities to ensure Reclamation project lands are managed for the benefit of the projects, including management of: cultural resources, fire, geographic information system (GIS), soil and hazardous waste, pest and invasive species, and ensure other related contractual agreements are properly administered. 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.

The regional GIS Program provides geospatial data and systems technical support, mapping services, aerial imagery, Light Detection and Ranging support and geospatial products for Reclamation programs, projects, and partners. All geospatial activities are administered under numerous overarching Executive and Departmental orders and guidelines, with the intent of providing accessible, accurate and consistent geospatial information. The GIS Program manages unmanned aerial systems for the collection of Reclamation project data and operates under the oversight of the Regional and Bureau Aviation Managers, the Office of Aviation Services, and the Federal Aviation Administration.

The cultural resource activities are in support of the National Historic Preservation Act (NHPA)Section 106, which mandates compliance to assess effects of Federal undertakings on cultural resources. They also support NHPA Section 110 activities which include inventorying and determining eligibility of properties for inclusion on the National Register of Historic Places (NRHP). In addition, the cultural resources program ensures compliance with the Native American Graves Protection and Repatriation Act (NAGPRA) including identifying 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 also includes completing actions to preserve Reclamation's museum property. The program further administers the requirements of the Archaeological Resources Protection Act (ARPA) and the Paleontological Resources Protection Act (PRPA).

AUTHORIZATION: Reclamation Act of 1902, June 17, 1902; the Antiquities Act of 1906, June 8, 1904; Protection of Timber Act of September 20, 1922; Economy Act of June 30, 1932; Soil Conservation and Domestic Allotment Act of 1935; P.L.76-260, the Reclamation Project Act of 1939. August 4, 1939; Reciprocal Fire Protection Act of 1955; P.L. 89-665, the National Historic Preservation Act of 1966, October 15, 1966; P.L. 91-512, Resource Recovery Act, October 26, 1970; P.L. 93-14, Solid Waste Disposal Act-Extension, April 9, 1973; P.L. 93-291, Archeological and Historic Preservation Act of 1974, May 24, 1974; P.L. 94-580, Resources Conservation and Recovery Act of 1976, October 21, 1976; Federal Grant and Cooperative Agreements Act of 1977; 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; Supplemental Appropriations Act of 1982; P.L. 99-499, Superfund and Reauthorization Act of 1986, October 17, 1986; Temporary Emergency Wildfire Suppression Act of 1988; 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. 89-72 Federal Water Project Recreation Act, Act of July 9, 1965, as amended by P.L. 102-575, Title XXVIII - Reclamation Recreation Management Act, Act of October 30, 1992; P.L. 104-170, The Federal Insecticide, Fungicide and Rodenticide, as amended, August 3, 1996; E.O. 13112 Invasive Species, February 3, 1999; E.O. 13287,

Preserve America, March 3, 2003; E.O. 12906, Coordinating Geographic Data Acquisition and Access, April 11, 1994, as amended by E.O. 13286, March 5, 2003; Healthy Forests Restoration Act of 2003; Energy and Water Development Appropriations Act of 2006; E.O. 13423 Strengthening Federal Environmental, Energy, and Transportation Management, January 24, 2007; Secretarial Order 3277, Enhanced Geospatial Governance, August 1, 2008; P.L. 111-011, Paleontological Resources Protection Act, March 30, 2009; Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, 2015.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Land Management and Development	\$10,684,000	\$10,060,000
Request	\$10,684,000	\$10,060,000
Prior Year Funds	\$40,000	\$0
Non-Federal	\$0	\$0
Total Program	\$10,724,000	\$10,060,000
Prior Year Funds/Non-Federal/Other Federal	(\$40,000)	\$0
Total Reclamation Allotment	\$10,684,000	\$10,060,000

WORK PROPOSED FOR FY 2020:

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 2020 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. 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. \$800

<u>FedCenter</u> - The program funds the Department's share of support costs from the Federal Facilities Environmental Stewardship and Compliance Assistance Center (FedCenter). \$1,900

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.

\$147,400\$

<u>Victim Witness Coordinator</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. \$18,600

<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. \$40,300

Threat Management - This project is driven by the need to detect potential network threats throughout Interior's IT Infrastructure. Operations and support of this capability allows Interior to determine the source and content of data being accessed by external sources and notify the bureau or office of the vulnerability.

\$450,400

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 number of active directory users among the bureaus/offices. \$1,005,100

<u>Immediate Office of the Secretary (IOS) Collaboration</u> - This activity funds centralized IT systems that are operated by the Office of the Chief Information Officer (OCIO) and support Departmentwide services and systems, including SharePoint and specific Office cloud services.

\$58,100

Radio Project Management Office – This program oversees and manages radio assets and systems across the Department. \$136,700

<u>IT Desktop Software Administration-</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. \$67,100

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. \$4,000

ESRI ELA and NAIP Payment Collection-Provides management and coordination for DOI-wide Enterprise License Agreement (ELA) with ESRI for mission critical geospatial technology, as well as coordination for DOI's participation in the National Agricultural Imagery Program (NAIP).

\$99,200

<u>Indirect Cost Services – 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 negotiations. \$126,500

The FY 2020 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

\$2,156,100

Administration of 504 Activities - Continues field inspections and surveys of Reclamation facilities and programs to determine deficiencies and retrofitting as required by the Architectural Barriers Act and Section 504 of the Rehabilitation Act. Continues development of data management protocols for accessibility compliance data. \$42,000

Cultural Resource Management, Compliance, and Administration - Continues managing cultural resources under Reclamation jurisdiction as mandated by Sections 106 and 110 of NHPA which includes identifying sites, buildings, and structures for nomination to the NRHP adaptive reuse of historic buildings and structures; historic properties interpretation; updating and maintenance of cultural resource database systems; and programs to preserve, protect, and stabilize historic properties. 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 as required by the ARPA and PRPA, 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 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. Continues coordination efforts with the Office of Policy and Administration for development of policy. \$1,331,000

Geographic Information Systems (GIS), Unmanned Aerial Systems (UAS), and National Spatial Data Infrastructure (NSDI) - Continues ongoing GIS and NSDI development, services, and support. Activities include geospatial data collection, analysis, presentation, distribution and management, 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. Provides UAS operations, support and oversight, for the collection of geospatial data.

Hazardous Waste 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 13834 by continuing to implement the Regional Sustainability and Environmental Management System, asbestos liability, and Poly-Chlorinated Biphenyls; and liaison with cooperating entities to ensure contractual arrangements are adequately administered. Continues membership of Environmental Protection Agency Regional Response Team in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR part 300).

\$722,000

Invasive Species/Pesticide Management - Continues to provide program direction, technical advice, development of new pest management techniques, assistance in inventorying invasive species, development of integrated pest management plans, and the drafting and publishing of pest management manuals for field operations and maintenance. Represents Reclamation on Department 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. Techniques help ensure Reclamation conserves water and meets requirements related to State water rights, interstate and international compacts, decrees, and contracts. \$146,000

<u>Land Records Management</u> - Continues required land record research, maintenance and verification of land records, and updating of Reclamation's land inventory system. Funding will be provided for the digitization of land records as well as other GIS activities. Funding will be used for the annual recertification of land records and reconciliation of the records to the financial system and additional land issues.

\$638,000

<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. Provides for securing of updated appraisals for existing use authorizations. Funding provides resources to actively pursue partnerships with potential land management partners which involves negotiation, development, and monitoring of new leases, licenses, permits, and other land use agreements. \$289,000

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 \$3,001,900 consent.

Wildland Fire Management - Continues fire suppression contracts with other agencies and activities for development of Reclamation wildland fire management plans using data obtained from demonstration projects. Activities include: technical assistance with wildland fire planning and suppression; Reclamation representation on interdepartmental coordinating and reporting groups; implementation of associated agreements that are west-wide in nature; and assistance to regions in preparation of fire management plans to ensure compliance with departmental fire management planning policy.

\$407,000

<u>Title Transfer</u> – Funding supports recently enacted legislation to facilitate the transfer of title of certain Reclamation projects and facilities when such transfers are beneficial. While Reclamation has engaged in efforts related to title transfer in the past on a case-by-case basis, this initiative will go further to facilitate greater local control of water infrastructure. The goal of this initiative is to allow local water managers to make more water management decisions at the local level, while allowing Reclamation to focus its management efforts on those projects with a greater federal nexus. As part of this effort, Reclamation will engage with water users and all stakeholders to identify projects and facilities that may be potential candidates for such a transfer.

Subtotal – Other Activity

\$7,903,900

Reclamation Request

\$10,060,000

Miscellaneous Flood Control Operations

LOCATION: The 17 Western States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: This program funds the runoff forecasting function for the Bureau of Reclamation (Reclamation). Reclamation generates runoff and water supply forecasts for all of its reservoirs. Snowpack, precipitation, and temperature data are compiled from various sources and are manipulated using regression relationships to predict seasonal runoff. Reclamation is improving its real-time forecasting ability by collaboratively working with the National Weather Service in developing river forecasting system models and extended streamflow and prediction models.

The program also makes flood forecasting possible through the collection of rainfall, snowpack, temperature, and streamflow measurements that are necessary to make real-time 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 (USGS) and State water resources departments.

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 Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$980,000	\$832,000
Enacted/Request	\$980,000	\$832,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$980,000	\$832,000
Prior Year Funds/Non Federal	(\$0)	(\$0)
Total Reclamation Allotment	\$980,000	\$832,000

WORK PROPOSED FOR FY 2020:

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 works 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.

Continues support of flood forecasting through the collection of rainfall, snowpack, temperature, and streamflow measurements that are necessary to make real-time decisions on reservoir operations during flood events. Continues the 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.

Continues participation in the administration of the Arizona State-wide flood warning system through participation in a multi-agency task force. \$832,000

Reclamation Request

\$832,000

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, negotiation, and implementation phases. Support includes Reclamation representation and leadership on Federal water rights assessment, negotiation, 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 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. 102-441, 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; P.L. 114-322, Water Infrastructure Improvement for the Nation Act of 2016, Title III, Subtitle D, Pechanga Water Rights Settlement, Subtitle F, Section 3605, San Luis Rey Settlement Agreement Implementation, Subtitle F, Section 3608, Chickasaw Nation of Oklahoma and Choctaw Nation Water Settlement, Subtitle G, Blackfeet Water Rights Settlement, December 16, 2016.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$11,685,000	\$11,685,000
Request	\$11,685,000	\$11,685,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$11,685,000	\$11,685,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$11,685,000	\$11,685,000

WORK PROPOSED FOR FY 2020:

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. In support of Federal Indian Self-Determination policies and statutes, program activities include assisting Tribes to better understand their water-related needs and developing water resources on Indian reservations through traditional and innovative technologies. Funds available for technical assistance and support for Indian water rights settlements will be allocated to the highest needs based on current program requirements in the year of execution. Reclamation will enter into contracts for financial assistance agreements with or provide direct services to Tribes receiving technical assistance.

\$3,221,000

Negotiation and Implementation of Water Rights Settlements - 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. Funds available for technical assistance and support for

Indian water rights settlements will be allocated to the highest needs based on current program requirements in the year of execution.

Reclamation currently participates on the following assessment and negotiation teams: Abousleman (Pueblos of Jemez, Zia, Santa Ana) New Mexico; Coeur d'Alene Tribe-Idaho, Fallbrook (Cahuilla, Pechanga, Ramona Bands) California; Flathead (Confederated Salish & Kootenai Tribes) Montana; Fort Belknap (Gros Ventre & Assiniboine Tribes) Montana; Havasupai (Havasupai Tribe) Arizona; 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); Ohkay Owingeh (Ohkay Owingeh Pueblo) New Mexico; Sif Oidak (Tohono O'odham), Arizona; Tonto Apache, 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 Tribes- Colorado; Blackfeet (Blackfeet Nation) Montana; Chickasaw and Choctaw (Chickasaw Nation of Oklahoma and Choctaw Nation) Oklahoma; 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; Pechanga (Pechanga Tribe) California; Pyramid Lake (Pyramid Lake Paiute Tribe) 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.

Program Support and Outreach - 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.

\$2,472,000

Subtotal, Water and Energy Management and Development

\$11,685,000

Reclamation Request

\$11,685,000

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. 76-260, 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 Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$2,462,000	\$2,308,000
Enacted/Request	\$2,462,000	\$2,308,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$2,462,000	\$2,308,000
Prior Year Funds/Non-Federal	(\$0)	(\$0)
Total Reclamation Allotment	\$2,462,000	\$2,308,000

WORK PROPOSED FOR FY 2020:

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 related economic analysis for contract pricing and cost allocation, 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. Continues review, approval, and compliance of contract and repayment actions, correspondence, and agreements to ensure protection of the Federal investment, protection and advocacy of Reclamation held water rights, and Tribal reserved rights.

§2,308,000

Reclamation Request

\$2,308,000

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 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$1,204,000	\$922,000
Facility Operations	\$1,496,000	\$1,291,000
Facility Maintenance and Rehabilitation	\$941,000	\$416,000
Enacted/Request	\$3,641,000	\$2,629,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$3,641,000	\$ 2,629,000
Prior Year Funds/Non Federal	\$0	\$0
Total Reclamation Allotment	\$3,641,000	\$2,629,000

WORKED PROPOSED FOR FY 2020:

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. In addition to these activities,

Reclamation will use funds to improve capability to develop title transfer agreements with non-Federal entities seeking transfer of title of projects, parts of projects and Reclamation facilities.

Subtotal, Water and Energy Management and Development

\$922,000

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. Training will include an emphasis on the importance of quantifying project benefits as a business practice necessary to be fiscally responsible and accountable to the taxpayers.

\$863,000

Environmental Management - The activities include: program coordination, guidance development, data collection and reporting, and training and technical advice and assistance to regional offices to achieve efficiency goals of reducing Federal energy and water (potable and other) use; evaluating and improving building operational efficiency related to use of purchased utilities; achieving high performance buildings, and utilizing Environmental Management Systems (EMS). To meet the requirements of the Energy Independence and Security Act of 2007 (EISA) and other statutes and requirements, Reclamation will conduct energy and water evaluations at its facilities and identify and implement measures including energy and water conservation. 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 assisting in achieving improvements building operational efficiency related to use of purchased utilities, EMS, EMS auditing, sustainable buildings, energy and water management, and other sustainability components. Improved data management and verification activities will continue.

Subtotal, Facility Operations

\$1,291,000

\$428,000

Facility Maintenance - Design, Cost Estimating and Construction (DEC) - 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. **\$416,000**

Reclamation Request

\$2,629,000

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, on average, 40 million megawatt hours of electricity per year, (enough to meet the annual needs of over 3.8 million United States households) and collecting over \$1.0 billion in gross power revenues for the Federal government. It would take more than 130 billion cubic feet of natural gas or about 7.1 million tons of coal to produce an equal amount of energy with fossil fuels.

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 supports Administration and Department of Interior (Interior) domestic energy security initiatives – facilitating the development of untapped hydropower potential on Federal water resource projects through collaborative regulatory reform, technological and operational innovation, and stakeholder outreach. These activities allow Reclamation to derive additional value *and revenue* from existing public infrastructure – reducing project operating costs (e.g. water and power delivery costs) and ensuring projects remain financially solvent in an increasingly turbulent operating environment. Revenues derived from incremental hydropower production are invested in the underlying federal infrastructure to ensure continued, reliable operations and benefits.

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 1992, October 24, 1992, as amended; P.L. 109-58, Energy Policy Act of 2005, August 8, 2005.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensure Energy and economic security for America

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

Rating (FRR)

Measure: Percent of time that Bureau of Reclamation hydroelectric generating units are available to the

interconnected Western electrical system during daily peak demand periods **Measure:** Amount of hydropower capability installed from (2018 -2022)

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$2,193,000	\$2,121,000
Facility Operations	\$307,000	\$307,000
Request	\$2,500,000	\$2,428,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$2,500,000	\$2,428,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$2,500,000	\$2,428,000

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 \$6,420,000, of which \$2,428,000 is from Federal appropriations, and \$3,992,000 is from direct funding.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development – Funding will continue the 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.

Funding supports continued implementation of Interior domestic energy security initiatives, increasing Reclamation Project hydropower capabilities and value. These activities include: policy development, oversight, and support services facilitating non-Federal hydropower development on Reclamation Projects through Lease of Power Privilege and FERC licensing; support of Reclamation automated data collection and archiving systems designed to achieve operational efficiencies and reduce power program costs, enabling Reclamation to perform fleet-wide data analytics to anticipate failures, increase unit

reliability, and pursue predictive maintenance strategies supporting long-term asset management; support of Reclamation's Hydropower Efficiency Research Systems work, designed to achieve operational efficiencies at Reclamation hydropower facilities; information sharing, coordination, and strategic planning with federal partners and industry; implementation of power rate reduction strategies (e.g. achieving supply and demand-side efficiencies and ensuring appropriate cost allocations, rating setting, and repayment) to maximize the value of Reclamation hydropower to our customers. Funding will also support Tribes in the development of untapped energy potential to better manage water resources. These activities will be pursued in coordination with Hydropower Memorandum of Understanding (MOU) partners, the Department of Energy and US Army Corps of Engineers.

\$4,485,000 Direct Funding: (\$2,764,000) \$1,721,000

Senior Leader Hydropower - Funding will provide for Reclamation's overall compliance with the FERC 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 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.

Subtotal, Water and Energy Management and Development

\$2,121,000

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.

\$1,535,000
Direct Funding:

\$1,228,000)

Subtotal, Facility Operations

\$307,000

Reclamation Request

\$2,428,000

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 Update for FY 2018-2022:

Mission Area 5: Protecting Our People and the Border

Goal #1: Ensure emergency preparedness & DOI law enforcement staffing addresses public safety risks **Measure:** Average Interior Readiness (I-READ) Index score for emergency preparedness across DOI Bureaus/Offices

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$600,000	\$646,000
Facility Operations	\$206,000	\$206,000
Request	\$806,000	\$852,000
Non-Federal	\$0	\$0
Prior Year Funds	\$15,892	\$0
Total Program	\$821,892	\$852,000
Prior Year Funds/Non-Federal	(\$15,892)	\$0
Total Reclamation Allotment	\$806,000	\$852,000

WORK PROPOSED FOR FY 2020:

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, tracking of accomplishments, providing technical and general guidance and direction, reviewing drawings and specifications, evaluating new facilities and monitoring existing facilities, and 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 implementation of the system designed to enact action plans for accessibility compliance and ongoing

compliance with Federal accessibility laws, regulations, and standards; preparation and implementation of action plans for facilities not in compliance with Federal accessibility standards; and provides for retrofits at facilities where other funding is not available. \$646,000

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. \$206,000

Reclamation Request

\$852,000

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 information collections, water district reviews, specialized assistance, and audits are 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 MEASURE: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$ 2,148,000	\$ 2,078,000
Request	\$ 2,148,000	\$ 2,078,000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$ 2,148,000	\$ 2,078,000
Prior Year Funds/Non-Federal/Other Federal	\$0	\$0
Total Reclamation Allotment	\$ 2,148,000	\$ 2,078,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development – Continue administration and enforcement of the Reclamation Reform Act (RRA), as well as improving RRA forms and communication to enhance program administration and customer service. Continue 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

\$2,078,000

Recreation and Fish and Wildlife Program Administration

LOCATION: The 17 Western States in Reclamation's Service Area

DESCRIPTION/JUSTIFICATION: The program 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 and to bring facilities into compliance with section 504 of the Rehabilitation Act of 1973, as amended, to protect the original Federal investments; and to save the Federal government the expense of operating these recreation areas that have been transferred to other entities. Partnerships are formed with non-Federal natural resource conservation groups (States, Tribes, and private entities), and Reclamation's participation in the interagency Federal Lakes Recreation Leadership Council to coordinate and implement recommendations of the National Recreation Lakes Study Commission, as consistent with Administration policy. In addition, the program provides for studies and planning opportunities in liaison with cooperating recreation interests, concessionaires, and fish and wildlife management agencies. Supports the Take a Warrior Fishing and other fishing programs for the public, including those with special needs. Supports efforts to connect the public to the public lands. The program also helps ensure reliable water deliveries by providing funds for Reclamation's support for evaluating impacts of existing Reclamation project operations on wetlands and endangered species habitat and for support of recreation, fish and wildlife management.

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 Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Land Management and Development	\$416,000	\$407,000
Fish and Wildlife Management and Development	\$6,081,000	\$2,842,000
Request	\$6,497,000	\$3,249.000
Non-Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$6,497,000	\$3,249,000
Prior Year Funds/Non-Federal/Other Federal	\$0	\$0
Total Reclamation Allotment	\$6,497,000	\$3,249,000

WORK PROPOSED FOR FY 2020:

Land Management and Development – Continues ongoing technical oversight and compliance of recreation areas managed by Reclamation and those managed by our partners. Activities include review, development and administration of recreation management agreements, leases, and concession contracts. Also continues Section 504 coordination, field reviews, addressing GPRA and ABC targets, and review of operation and maintenance of facilities. Also includes review and evaluation of existing concessions; development and presentation of Reclamation-wide training; input into the condition facility assessment program; and input into the expenditure of Title 28 funds. Recreation staff responsibilities include, among other things, providing administration of the Recreation Use Data Report; preparation of Reclamation's responses to Government Accountability Office and Office of Inspector General audits and reports; and being a member of multiple Department of the Interior workgroups and teams concerning recreation and concessions.

Fish and Wildlife Management and Development -

Across all program areas within Reclamation States, continues funding and activities to prevent and combat infestation of quagga and zebra mussels. These invasive mussels are rapidly reproducing invasive species that have infested multiple operational areas within Reclamation facilities, impacting pumping capabilities for power and water operations, blocking water intake structures, affecting the water supply, affecting the ecosystems by feeding off existing algae resulting in a shift in native species and disrupting the ecological balance. This has negative and costly impacts on Reclamation operations, and often results in damage to structures, which leads to additional repairs or replacement of submerged equipment. Research is continuing to find ways to impede the quagga and zebra mussels' population growth and understand the ecological impacts. Reclamation operation and maintenance activities will use maintenance periods to assess possible impacts as they look at infrastructure at the reservoirs, dams and power plants. Reclamation has developed Reclamation-wide and Regional task forces to address the issues and impacts of the infestation and participates in other interagency quagga and zebra mussel related meetings, and continues work with city, county, State, Federal and Tribal agencies to understand and quantify the level of system impacts and potential costs. 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.

Funding will continue to support Reclamation mussels' activities framework established in the Quagga – Zebra Mussel Action Plan (QZAP) for Western U.S. Waters submitted to the Aquatic Nuisance Species Task Force by the Western Regional Panel on Aquatic Nuisance Species. Our work is being pursued in close cooperation with the Western Governors Association, and includes a focus on working with States and Tribes to keep invasive mussels from infecting the Columbia River Basin in Oregon, Washington, Idaho, Montana, Wyoming, Nevada, and Utah. The Columbia Basin is the last major uninfected watershed in the United States. Regional estimates posit that a full-blown infestation in the region would cost its citizens \$500 million annually in lost economic production, higher electric rates, and would risk further endangered species complications.

Continues development of a database of environmental conditions at Reclamation reservoirs. This database can support identification of areas susceptible to mussel infestation. Utilizing information existing and from the database being developed, Reclamation is developing an infestation risk model, the output of which will help identify where habitat conditions are most suitable for infestation. This model will help identify where prioritization of resources should occur for any increased early detection and monitoring activities as well as prevention, outreach and education. Additionally, Reclamation 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. Funding is included for prevention, early detection and monitoring, containment and control at existing facilities, outreach and education, as well as research focused on these issues.

Continues partnering with events in adaptive environment programs where special needs children are given the opportunity to experience America's great outdoors.

Additionally, supports 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.

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, and Nevada - Continues fish and wildlife management, administration, public outreach including participation in invasive species working groups, quagga mussel and other aquatic invasive species coordination, management, outreach and research, coordination efforts with other agencies involving natural resources on Reclamation lands, and public education activities associated with the program. Continues to coordinate information sharing, research, and management options with 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 surveying and monitoring studies of locally and regionally important resident and migratory species and their habitats to determine breeding areas, reproductive success, diet, and population size. 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 target species.

Continues fishery surveys of Lakes Mead, Mohave, and Havasu, and the Colorado River above and below those reservoirs, in addition to other waters within the boundaries of the Region and managed by Reclamation. Survey methods include netting, shocking, trapping fishes, and conducting water quality sampling. Conducts limnology studies, telemetry studies, and participates in habitat improvement programs. Coordinates monitoring efforts to contain, manage, and possibly reduce quagga mussel populations in the lower Colorado River and reservoirs.

Continues assisting Federal and non-Federal partners with fishermen and boater access issues associated with water level fluctuations of Lake Mead. Participates in the Lake Havasu Fisheries Partnership, conducting underwater assessments of sport fish habitat and structures, fishing docks, environmental education, Lake Havasu management, and the Fishery Improvement Program. 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.

Reclamation biologists continue to survey annually for the listed yellow-billed cuckoo and southwestern willow flycatcher along the San Pedro and Gila Rivers, and in parts of the Agua Fria River near Lake Pleasant, on Reclamation properties; attend the State Wildlife Society Meetings and Tamarisk Coalition meetings; and participate in the northern Mexican garter snake, narrow-headed garter snake, and Sonoran desert tortoise working groups. The tamarisk beetle was released in Utah and Mexico in 2007, and has since been observed on Reclamation properties in Arizona and Nevada. The tamarisk beetle impacts listed and migratory bird species by decimating tamarisk habitat. The vegetation damage caused by the tamarisk beetle increases the risk and intensity of fires on Reclamation lands. Biologists will continue to survey for the beetle and investigate beetle impacts.

Continues to sponsor and participate in the Monitoring Avian Productivity and Survivability (MAPS) station at Reclamation's Cook Lake property near the San Pedro River. This long-term MAPS station, where birds are captured by mist-net, may provide data to enhance our understanding of shifts in avian movement and habitat-use patterns relating to environmental change.

Continues to fund Pima County to manage Reclamation-owned Rancho Del Cielo property, which is home to a listed bat species. The communities along the San Pedro and Gila Rivers each hold annual river festivals, in which Reclamation participates.

New Mexico, Utah, Wyoming, Colorado - Continues program management and analysis on recreation, fish and wildlife; policy guidance, and interpretation; database management; and regional oversight of grants and cooperative agreements. Some funding goes towards recreation and other fishing programs.

Subtotal, Fish and Wildlife Management and Development Request

\$2,842,000

Reclamation Request

\$3,249,000

Research and Development Desalination and Water Purification Research Program

LOCATION: Nationwide

DESCRIPTION/JUSTIFICATION: This program provides financial assistance for advanced water treatment research and development, leading to improved technologies for converting unusable waters into useable water supplies. Advanced water treatment is a key strategy for water managers to expand water supplies.

The program supports Reclamation's goal of creating new water supplies, thus supporting Reclamation projects that benefit Native Americans, Western communities, and Western river basins. The program is also an activity contributing to the Presidential Memorandum (Memorandum) on Promoting the Reliable Supply and Delivery of Water in the West (October 19, 2018), Section 4 (Improving Use of Technology to Increase Water Reliability), parts (a) and (b), which calls for Reclamation to invest in technology and reduction of regulatory burdens to enable broader scale deployment of desalination technology and use of recycled water.

Program priorities include development of improved methods of desalination and reducing the costs and environmental impacts of treating impaired waters including, but not limited to, sea water, inland brackish groundwater, municipal wastewater, and produced waters from oil and gas extraction activities, the latter of which helps accommodate the Secretary's initiatives to expand these activities. Through the program's competitive extramural funding opportunity announcements, Reclamation awards research and development cooperative agreements with non-Federal recipients. 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 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, as amended by the Water Infrastructure Improvements for the Nation Act (WIIN Act, P.L. 114-322); 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 Strategic Plan Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

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

Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget	
Water and Energy Management and Development	\$18,653,000	\$1,475,000	
Facility Operations	\$1,150,000	\$1,150,000	
Request	\$19,803,000	\$2,625,000	
Non-Federal	\$0	\$0	
Prior Year Funds	\$0	\$0	
Total Program	\$19,803,000	\$2,625,000	
Prior Year Funds/Non-Federal	\$0	\$0	
Total Reclamation Allotment	\$19,803,000	\$2,625,000	

WORK PROPOSED FOR FY 2020:

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 desalination methods, more effective concentrate disposal tools, advanced treatment systems, treatment systems applicable to small rural communities, and technologies to reduce the costs and environmental impacts of treating impaired waters including, but not limited to, 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 as well as new and ongoing pilot-scale projects. 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. The 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. Decrease is due to the receipt of specific additional funding received from Congress in FY 2019, which includes an additional \$12 million under the authority of WIIN Act Section 4009(a) for the construction of ocean and brackish water desalination projects and additional \$4.9 million for research and pilot projects' financial assistance.

Subtotal, Water and Energy Management and Development

\$1,475,000

Facility Operations – The program will continue to support administration, operation and maintenance (O&M) of BGNDRF. The O&M at BGNDRF will support testing of two to four brackish desalination pilot plants studying small scale systems and concentrate disposal.

Subtotal, Facility Operations

\$1,150,000

Reclamation Request

\$2,625,000

SCIENCE AND TECHNOLOGY PROGRAM

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, supporting Reclamation's mission of providing water and generating power.

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 through innovative development, applied, and demonstration research. The program supports development of new tools and technologies that contribute to the efficient operations of Reclamation facilities and improved water and power management capabilities of Reclamation and western water managers. S&T Program products strengthen the soundness of Reclamation's decision-making related to water and power program implementation and facility operations.

The S&T Program supports the Administration's priorities for the FY 2020 budget by funding engineering and technological innovation, which promotes economic growth and job creation, supports maintaining and improving our water and power infrastructure, spurs more efficient production of energy resources, enables reliable water delivery to customers, improves safety, limits the impacts of invasive species and ensures environmental compliance responsibilities are met. The program is also an activity contributing to the Presidential Memorandum (Memorandum) on Promoting the Reliable Supply and Delivery of Water in the West (October 19, 2018), Section 4, Improving Use of Technology to Increase Water Reliability, which promotes and encourages innovation, research, and development of technology that improves water management; and to Section 3, Improve Forecasts of Water Availability, which calls for water experts and resource managers to improve the information and modeling capabilities related to water availability and water infrastructure projects.

S&T Program goals are to identify the technical and scientific problems affecting accomplishment of Reclamation's core mission. This is accomplished through leveraging internal and external capabilities to develop and promote cost-effective solutions and facilitating technology transfer both within Reclamation and outside with external stakeholders to spur economic growth and job creation. Program funding is allocated and coordinated across four program areas: (1) Research and Development Projects, (2) Water and Power Technology Prize Competitions, (3) Technology Transfer, (4) and Dissemination.

<u>Research and Development Projects</u>: S&T Program projects address a wide range of science and technical challenges facing Reclamation water and power managers spanning Reclamation's core mission and are categorized in the following areas:

- Water Infrastructure: Improve the durability and resiliency of Reclamation water storage, water delivery, and facilities by producing or advancing effective solutions, tools, and practices that Reclamation facility managers can use to cost effectively maintain, modernize, and extend the life of Reclamation's aging infrastructure.
- Power and Energy: Develop and advance solutions, tools, and practices that improve the reliability, efficiency, capacity and safety of Reclamation's hydropower facilities to reduce costs and increase energy supplies. This includes developing a wide range of hydro and non-hydro tools and strategies that integrate operations, increase energy supplies and achieve energy efficient practices within Reclamation pumping plants and other facilities in support of Reclamation's core operations and maintenance responsibilities.
- Water Operations and Planning (WP): Develop solutions and tools that help Reclamation water managers make effective reservoir and river system operational and planning decisions. Improve the integration, evaluation, understanding, and presentation of critical data and information about floods,

- droughts, water supplies, demands, as well as quality, quantity and extreme event data and information and other water management conditions.
- <u>Developing Water Supplies (WS):</u> Develop, enhance, and protect water supplies for Reclamation stakeholders with new technologies, solutions, and practices that expand, liberate, or conserve water supplies.
- Environmental Issues for Water Delivery and Management (EN): Improve the reliability of Reclamation water deliveries by producing effective solutions, tools, and practices that Reclamation water managers can use to prevent water conflicts, balancing competing water needs, and support State and Federal environmental compliance. Research in this area includes support for the detection, prevention, and control of invasive species, including invasive zebra and quagga mussels.

Identification and prioritization of research needs under each area are guided by input from Reclamation endusers and informed by perspectives from partner agencies and stakeholders. Projects address any of the five research areas and typically have strong cost-sharing and collaboration with Reclamation end-users, stakeholders, other agencies, and/or universities. Many funded research projects involve leveraging external expertise and specialized collaborative capabilities, which enables targeted research that more rapidly addresses priority science needs, and complements internal expertise, thus reducing the need for short-term expert hires. Leveraging external expertise is implemented through contracts, cooperative agreements, interagency agreements, and technology transfer agreements as needed.

Water and Power Technology Prize Competitions: Reclamation began implementing prize competitions in 2015 under the America COMPETES Act authority and continues to do so under the Act, as amended (15 U.S. Code § 3710 – Prize Competitions). Reclamation is using prize competitions to harness the innovative capacity of the American public and private sectors to solve R&D problems related to Reclamation's mission and stakeholder interests. Specifically, in Reclamation, prize competitions target evasive scientific and technological problems related to infrastructure sustainability, water availability, and environmental compliance that affect water delivery and hydropower generation. Prize competitions complement traditional research by providing an innovation tool that can help find breakthroughs or overcome technical obstacles or complexities. The private sector and other Federal agencies have successfully used prize competitions to tap innovative minds that cannot be reached through traditional approaches to find creative new solutions to tough problems. Reclamation has launched or completed 15 competitions. The creativity of submitted solutions has been impressive and a number are being explored for further R&D or commercialization. Building on the experience gained with the initial competitions, Reclamation is launching larger competitions to include multiple rounds of competitions culminating in grand prizes awarded to the winners that can successfully turn their ideas into reality or bring them to the marketplace, which would benefit Americans far beyond the immediate beneficiaries. Reclamation has formed collaborations with the private sector, State and local agencies, and other Federal agencies to design, judge and/or co-sponsor specific prize competitions. All prize competitions are posted on the Federal prize competition crowd-sourcing platform Challenge.gov.

Technology Transfer: The Federal technology transfer legislation authorizes Reclamation to partner with the private sector and other non-Federal entities to develop new and useful technical solutions and move them into widespread use. The partnership of technology transfer agreements includes Cooperative Research and Development Agreements (CRADAs), Materials Transfer Agreements, Facility Use Service Agreements, and licensing Agreements. Reclamation and non-Federal entities can combine their expertise, equipment, facilities, intellectual property and other resources to develop useable solutions that are aligned with Reclamation's mission. Reclamation also has unique research facilities and field sites where non-Federal entities can access to test and mature their technologies. Non-Federal entities will help mature, manufacture and market the technical solutions to the broader water management community. Facilitating effective partnerships leverages capabilities and costs and accelerates the development and transfer of Reclamation and non-Federal entities' technical solutions to stakeholders, the broader water management community, and the American public.

<u>Dissemination / R&D Infrastructure</u>: Beyond the technology transfer activities described previously, disseminating research results, 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 utilizes a contemporary knowledge management system to support research dissemination and improve research workflow. Features include providing 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, as amended by the American Competitiveness and Innovation Act of 2017 (15 U.S.C. § 3719).

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity

Measure: Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 5: Protecting Our People and the Border

Goal #4: Provide science to safeguard communities from natural hazards

Measure: Number of studies and scientific investigations initiated (or completed) with benefits to Western water management of extreme hydrologic events such as droughts and floods

Measure: Number of Reclamation activities developing or applying science for water management of extreme hydrologic events (e.g. droughts and / or floods) that involve partnerships or stakeholders

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$16,514,000	\$11,014,000
Request	\$16,514,000	\$11,014,000
Non-Federal and Other Federal	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$16,514,000	\$11,014,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$16,514,000	\$11,014,000

WORK PROPOSED FOR FY 2020:

Water and Energy Management Development

Research and Development Projects: In FY 2020, the Science and Technology program will fund projects addressing critical water and power management technical challenges in five research areas: Water Infrastructure, Power and Energy, Water Operations and Planning, Developing New Water Supplies, and Environmental Issues in Water and Power Delivery. These challenges are identified in the program's Science Strategy Implementation

Research and Development Science and Technology Program

Plan, which is updated annually to reflect research progress and changing priority science needs to steer project funding considerations. In addition, the S&T Program will continue to build external collaborations that provide complementary expertise, provide access to unique capabilities and facilities, share information, and avoid duplication.

<u>Water and Power Technology Prize Competitions:</u> Reclamation will continue prize competition activities to complete multi-year prize competitions initiated and funded with previous appropriations, as well as implement subsequent new competitions and addressing other technical challenges in water availability, infrastructure and environmental compliance.

<u>Technology Transfer</u>: Continue existing CRADAs and 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 technologies.

<u>Dissemination</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 \$11,014,000

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 Interior on the Dams Sector Government 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, information sharing, and security-related studies and development.

Security Program activities include personnel security and suitability, 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 2019, the security reimbursability ceiling is projected to be approximately \$23.3 million; however, this figure will vary depending on the FY 2018 Consumer Price Index. Costs are expected to exceed the ceiling by approximately \$5.8 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, in November 2001, Congress enacted P.L. 107-69, which gave Reclamation new, but limited law enforcement authorities. Specifically, per P.L. 107-69, 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 2017, Reclamation replaced organic law enforcement/police personnel at Hoover Dam with proprietary security

guards, and now relies solely on interagency or cooperative agreements with law enforcement entities for law enforcement support and/or response.

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 the Department of the Interior and Bureau of Reclamation missions.

Reclamation's law enforcement program focuses on counter-terrorism and critical infrastructure protection, by way of 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 sensitive law enforcement information systems, directly offer decentralized Regional leadership law enforcement advice, and provide enhanced deterrence and response capabilities by way of performing and/or coordinating investigations of criminal activities, internal affairs inquiries/investigations, and/or suspicious incidents associated with Reclamation facilities.

Reclamation's Information Sharing and Law Enforcement Support (ISLES) group analyzes and disseminates information related to Reclamation projects, lands, and facilities; conducts threat assessments for Reclamation assets; and provides or attends classified intelligence briefings related to Reclamation facilities. These activities are accomplished in conjunction with and in support of regional special agents and regional security officers by way of partnerships with the Federal Bureau of Investigation (FBI)/Joint Terrorist Task Force (JTTF), State fusion centers, and other intelligence community organizations or collaborative relationships.

Departmental Guidance – Reclamation's site security budget addresses the Department of the Interior's program guidance including: (1) completion of security improvements at the Department of the 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. The Department of the 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.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 5: Protecting Our People and the Border

Goal #1: Ensure emergency preparedness & DOI law enforcement staffing addresses public safety risks **Measure:** Percent of National Park System, National Wildlife Refuges, FWS Investigations, Indian Reservations, Reclamation Security, US Park Police, and BLM Public Land program units with an updated law enforcement staffing model

COMPLETION DATA: This is an ongoing program.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Facility Operations	\$22,104,000	\$24,243,000
Facility Maintenance & Rehabilitation	\$4,116,000	\$12,116,000
Request	\$26,220,000	\$36,359,000
Non-Federal ^{1/}	\$16,185,935	\$16,616,016
Prior Year Funds	\$3,200,326	\$0
Total Program	\$45,606,261	\$52,975,016
Prior Year Funds/Non-Federal ^{1/}	(\$19,386,261)	(\$16,616,016)
Total Reclamation Allotment	\$26,220,000	\$36,359,000

The Non-Federal amount includes the up-front funding for the reimbursable security O&M costs.

WORK PROPOSED FOR FY 2020:

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, security-related policy development and compliance, and funds management. Continues funding for Regional Security Officers, NCI Security Officers, Area Office Security Coordinators, 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 the Department of the 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, and conducting studies and development activities on potential mitigation measures and new technologies.

Includes the appropriated portion of post-9/11 guards and patrols costs. Also includes security-related O&M costs that are projected to exceed the annual reimbursability ceiling and will need to be funded with Federal dollars.

<u>Information Sharing and Law Enforcement Liaison Program:</u> Continues law enforcement support and liaison activities and oversight, including administrative functions. Continues to coordinate 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 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. \$40,859,016

Non-Federal – Power customers (\$16,616,016)

Subtotal, Facility Operations

\$24,243,000

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, criminal activities, and unauthorized operation of water control systems, and will reduce the security-related risk at critical assets. The FY 2020 President's Budget request reflects an increase of \$8 million for the Hoover Dam Entry Inspection Station project.

Subtotal, Facility Maintenance and Rehabilitation

\$12,116,000

Reclamation Request

\$36,359,000

WaterSMART Program

LOCATION: The 17 Western United States in Reclamation's Service Area.

DESCRIPTION/JUSTIFICATION: The American West faces serious water challenges. Wide-spread drought, increased populations, aging infrastructure, and environmental requirements all strain existing water and hydropower resources. Adequate and safe water supplies are fundamental to the health, economy, and security of the country. Through WaterSMART, Reclamation will continue to work cooperatively with States, Tribes, and local entities as they plan for and implement actions to increase water supply through investments to modernize existing infrastructure and attention to local water conflicts.

The WaterSMART Program includes funding for cost-shared grants for water management improvement projects; efforts within the Basin Study Program to evaluate and address imbalances between supply and demand in river basins throughout the West; Title XVI Water Reclamation and Reuse projects; the establishment and development of collaborative watershed groups through the Cooperative Watershed Management Program; planning and design activities through the Water Conservation Field Services Program; and a comprehensive approach to drought planning and implementation actions to proactively 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 is done in partnership and cooperation with non-Federal entities and other Federal agencies to reduce conflict, facilitate solutions to complex water issues, and stretch limited supplies. For example, WaterSMART supports investments in existing infrastructure to increase water supply reliability by leveraging Federal and non-Federal funding. Funding provided through WaterSMART Grants is used for projects such as installing automation and water measurement technologies and lining and piping canals, and Drought Response Program funding is used for improvements that increase flexibility during times of drought, such as lowering intakes and installing interties. WaterSMART also supports collaboration with multiple partners to reduce conflict and address complex water issues. For example, Water Marketing Strategy Grants support the development of water markets, consistent with State law, as a tool to increase available supplies. Likewise, 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.

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; P.L. 114-322, Water Infrastructure Improvements for the Nation Act, December 16, 2016; 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. Subsequently, an additional \$100 million of appropriations ceiling was authorized in P.L. 114-322, the Water Infrastructure Improvements for the Nation Act, with the condition that \$50 million of the ceiling be used to carry out Section 206 of P.L. 113-235 (pilot system conservation projects to increase Colorado River System water in Lake Mead and the initial units of Colorado River Storage Project reservoirs). An additional \$30.0 million of appropriations ceiling was authorized in P.L. 115-255, the Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act, 2019. Reclamation estimates that approximately \$33.7 million of the \$430.0 million available appropriations ceiling will remain after FY 2019 appropriations. WaterSMART Grants, the Water Conservation Field Services Program, 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 authorized \$90 million to carry out drought emergency assistance and drought contingency planning activities. An additional \$30 million of appropriation ceiling was authorized in P.L. 115-141, Consolidated Appropriations Act, 2018. Reclamation estimates that approximately \$28 million of the authorized appropriations ceiling will be remaining after FY 2019.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Water and Energy Management and Development	\$113,246,000	\$19,901,000
Facility Maintenance & Rehabilitation	\$0	\$0
Enacted/Request	\$113,246,000	\$19,901,000
Non-Federal Funds	\$0	\$0
Prior Year Funds	\$0	\$0
Total Program	\$113,246,000	\$19,901,000
Prior Year Funds/Non-Federal	\$0	\$0
Total Reclamation Allotment	\$113,246,000	\$19,901,000

WORK PROPOSED FOR FY 2020:

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 on-the-ground water management improvements, including projects that save water; mitigate conflict risk in areas at a high risk of water conflict; and accomplish other benefits to increase the reliability of existing supplies. In addition, some projects may also 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 benefits are given the greatest consideration for funding.

Through WaterSMART Grants, funding is also used to support small-scale water efficiency projects (up to \$75,000 in Federal funding for each project) that have been identified through previous planning efforts. Reclamation has developed a streamlined selection and review process to reflect the small-scale nature of these projects. Additionally, WaterSMART Grants funding is used to support stakeholder efforts to develop water marketing strategies to increase water supply reliability. These grants support non-Federal planning efforts to develop an approach to water marketing locally, on a collaborative basis, with involvement from interested stakeholders.

WaterSMART Grants leverage Federal funding by requiring a minimum of 50 percent non-Federal costshare contribution. Grants will be available to States, Indian 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 near-term impact on conservation and improved water management. All funding is allocated on a competitive basis using established, merit-based criteria. In FY 2020, Reclamation anticipates funding approximately 14-18 water and energy efficiency grants, 35-40 small-scale water efficiency projects, and 3-5 water marketing strategy grants to continue working toward increasing conservation and efficiency on a West-wide basis. \$10,000,000

Cooperative Watershed Management Program – Through this program, the Department provides financial assistance to establish and further develop collaborative watershed groups. 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 Indian Tribes. In 2019, Reclamation intends to provide funding for the development of watershed groups, including outreach to ensure that the groups are representative of the diversity of stakeholders within the watershed, the development of watershed restoration plans to identify critical water issues related to water quantity and quality, and scoping, planning and implementing on the ground watershed management projects. Funding will be allocated on a competitive basis using established criteria.

In accordance with Section 6002 of the Cooperative Watershed Management Act, Subtitle F of Title VI of the Omnibus Public Land Management Act of 2009, Reclamation is required to report on the benefits of the program. Since 2012, Reclamation has awarded \$5 million in funding for the establishment or further development of 57 watershed groups across the West. In 2018, Reclamation provided \$2.6 million in funding to 27 watershed groups to establish a new group or to further develop an existing group. \$250,000

<u>Basin Study Program</u> – Reclamation continues implementation of Section 9503 of the SECURE Water Act through the Basin Study Program. Basin Study Program activities support stakeholder-driven efforts to address imbalances between water supply and demand in western river basins, and provide applied science, tools, guidance, and information to support water management planning across Reclamation's mission areas. The funding will support baseline assessments of risks and impacts to water supply and demand; the development of additional tools, data and guidance needed to carry out Reclamation's mission; and will continue to support collaborative efforts to evaluate and address imbalances between supply and demand including basin studies and related follow-on activities.

Reclamation's activities under the Basin Study Program support Reclamation planning activities, including reservoir operations planning, appraisal and feasibility studies, and environmental analyses. For example, baseline assessments include analysis of drought forecasting methodologies, and development of tools for making groundwater information more accessible to resource managers. Support for water managers is also provided through competitive grants to develop tools and information to help water managers assess availability of water supplies and to optimize operations. Site-specific pilots test and apply new science and tools in areas critical to Reclamation's operations. Reclamation is currently finalizing 5 Reservoir Operations Pilots to identify potential improvements to western reservoir operations. The Basin Study Program also provides support for improved consistency and management of Reclamation data resources. Through these activities, Reclamation has established an internal water supply planning and reservoir operations network that provides technical expertise and information to support water management efforts across Reclamation and with our Federal and non-Federal partners.

\$2,000,000

<u>Title XVI</u> – The Title XVI Program, as authorized by Title XVI of P.L. 102-575, as amended, includes planning, design, and construction activities to reclaim and reuse wastewaters and naturally impaired ground and surface water in the 17 Western States and Hawaii.

Funding is allocated through a competitive process using evaluation criteria focused on creating a more reliable water supply in a cost-effective manner, supporting Departmental priorities, addressing environmental water quality concerns, and meeting other program goals. In FY 2020, Reclamation will make funding available for water reuse research projects through a competitive process.

\$3,000,000

Water Conservation Field Services Program – The Water Conservation Field Services Program (WCFSP) 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. Funding is used to make cost-shared financial assistance available on a competitive basis at the area and regional office levels, as well as for technical assistance from Reclamation staff. Funding may be used to develop water conservation plans, identify water management improvements through System Optimization Reviews, design water management improvements, and to improve application of water conservation technologies through demonstration activities.

\$1,750,000

<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 cities, agriculture, energy production and other industries. Drought impacts 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.

Reclamation initiated the Drought Response Program in FY 2015 to implement a 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 that emphasizes involvement from multiple stakeholders and cost-sharing from non-Federal sponsors. These comprehensive drought plans and implementation actions help Reclamation stakeholders avoid drought-related crises in the short term, while increasing resiliency to drought in the long term.

In FY 2019, Reclamation anticipates awarding funding under three program elements to: (1) develop and update comprehensive drought plans; (2) implement projects that build long-term defense against drought; and (3) implement emergency response actions. The majority of program funding will be used to support drought contingency planning and drought resiliency projects. Some program funding will be reserved each year for emergency response actions.

In accordance with Section 306 of the Reclamation States Emergency Drought Relief Act of 1991, Reclamation is required to report on past and proposed expenditures and accomplishments under the Act. In FY 2018, Reclamation selected 2 proposals for the development of comprehensive drought plans and

15 proposals for the implementation of drought resiliency projects for a total of approximately \$8.6 million. In FY 2020, Reclamation plans to award funding for 10-15 drought resiliency projects. \$2.901.000

Subtotal, Water and Energy Management and Development

\$19,901,000

Reclamation Request

\$19,901,000

FY 2020 Central Valley Project Restoration Fund FY 2020 Budget Summary \$000

Project		FY 2020 President's Budget
Miscellaneous Project Programs	11,200	7,700
CVPIA Administrative	1,500	1,500
Restoration of Riparian Habitat and Spawning Gravel	4,500	2,000
Central Valley Comprehensive Assessment/Monitoring Program	4,000	3,000
Anadromous Fish Screen Program (AFSP)	1,200	1,200
Miscellaneous Project Programs	36,858	34,427
Anadromous Fish Restoration Program (AFRP)	14,758	12,627
Habitat Restoration Program (Other CVP Impacts)	1,500	1,000
Dedicated Project Yield	700	700
Refuge Water Conveyance	13,000	16,400
Refuge Water Supply, Facility Construction	6,000	3,000
Ecosystem/Water Systems Operations Model	900	700
San Joaquin Division		8,572
Water Acquisition Program	9,500	8,272
Water Acquisition - Instream Flow	300	300
Shasta Division	650	650
Clear Creek Restoration	650	650
Trinity River Division	1,500	1,500
Trinity River Restoration	1,500	1,500
San Joaquin River Restoration Program	2,000	2,000
San Joaquin River Restoration Program	2,000	2,000
TOTAL - CVP RESTORATION FUND		54,849

Note: Does not include funding from Water and Related Resources.

Note: The budgetary allocations shown here are conceptual and subject to change pending the development of the FY20 CVPIA Annual Work Plan, which will be developed in the Spring and Summer of 2019.

Note: All funding shown represents Fish and Wildlife funding.

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 (Service) 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 2020 request would 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.

The budget of \$54.849 million is expected to be offset fully by discretionary receipts based on what 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. Weather variability and other factors over the past 25 years has created extreme variance in annual budget requests to maintain that average. In FY 2020, the CVPRF account represents an administrative decision to "reset" the three-year rolling average to stabilize the year-to-year variability in discretionary requests.

The CVPIA increases fishing and hunting opportunities throughout the state of California, primarily within the Central Valley. CVPIA provides firm, reliable annual water supplies to 19 wildlife refuges in California. The increased reliability of water due to CVPIA is critically important to the millions of waterfowl that utilize the Pacific Flyway and depend on this habitat for critical feeding, breeding, and roosting habitat. On those refuge zones where hunting and fishing are allowed, this reliable water supply provides significantly enhanced opportunities for thousands of outdoor enthusiasts each year.

The CVPIA has worked for 26 years to increase anadromous fish production in the Central Valley. An estimate¹ of the economic impact of recreational salmon's benefit to the State of California in 2013 was \$105 million. Striped bass also provide a significant economic impact.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #1: Utilize science in land, water, species and habitat management supporting decisions and

activities

Measure: Number of acre feet of optimum refuge water supply delivered **Measure:** Number of acre feet of water provided as flow for fish habitat

-

¹ (2014, July 21). What is a Fish Worth. Retrieved from https://fishbio.com

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Fish and Wildlife Management and Development	\$62,008,000	\$54,849,000
Enacted/Request	\$62,008,000	\$54,849,000
Prior Year Funds	\$5,028,147	\$0
Total Program	\$67,036,147	\$54,849,000
Prior Year Funds	(\$5,028,147)	\$0
Total Reclamation Allotment	\$62,008,000	\$54,849,000

Anticipated Receipt Allocations

	FY 2019	FY 2020
Friant Division Surcharges, 3406(c)(1) ^{1/}	\$0	\$0
Additional Mitigation and Restoration Payments, 3407(d)	\$61,707,000	\$54,548,000
Tiered Water Charges	\$300,000	\$300,000
Municipal and Industrial (M&I) Surcharge	\$1,000	\$1,000
Total Anticipated Receipt Allocations	\$62,008,000	\$54,849,000

¹⁷Receipts from Friant Division Surcharges, 3406(c) (1) would be deposited in San Joaquin River Restoration Fund as provided for in P.L. 111-11, Title X, Section 10009(c)(1)(A).

CVPIA Requested Funds

Division	FY 2019 Water and Related Resources	FY 2019 Restoration Fund	FY 2020 Water and Related Resources	FY 2020 Restoration Fund
Miscellaneous Project Programs	\$35,000	\$48,058,000	\$31,000	\$42,127,000
San Joaquin Division	\$0	\$9,800,000	\$0	\$8,572,000
Shasta Division	\$80,000	\$650,000	\$80,000	\$650,000
Trinity River Division	\$11,911,000	\$1,500,000	\$9,991,000	\$1,500,000
Friant Division	\$0	\$2,000,000	\$0	\$2,000,000
Delta Division	\$2,547,000	\$0	\$1,147,000	\$0
Total	\$14,573,000	\$62,008,000	\$11,249,000	\$54,849,000

WORK PROPOSED FOR FY 2020:

The budgetary allocations shown here are conceptual and subject to change pending the development of the FY20 CVPIA Annual Work Plan, which will be developed in the Spring and Summer of 2019.

Fish and Wildlife Management and Development - Miscellaneous Project Programs, CVP

CVPIA Administration – Section 3410. Funds would 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 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 programs' priorities, assessing program accomplishments and benefits, annual reporting to Congress, financial management, and coordination with partner agencies and stakeholders. These positions provide for managing the CVPIA activities in an effective and accountable manner and to meet Congressional reporting requirements.

Restoration of Riparian Habitat and Spawning Gravel - Section 3406(b)(13). Funding would be used for procurement and placement of suitably sized gravel for restoration and/or rejuvenation of anadromous fish spawning habitat, as well as 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 and steelhead. Identification of willing land owners, public involvement, and permitting success of project planning determines the final site selection in all three rivers. Periodicity of gravel placement activities are dependent on watershed hydrology which modifies instream habitat.

\$2,000,000

Central Valley Comprehensive Assessment/Monitoring Program - Section 3406(b)(15). The Program continues to evolve to meet the needs of the CVPIA Science Integration Team (SIT) and the CVPIA Data Management Strategy (CDMS). Ongoing monitoring efforts continue to evaluate the progress of CVPIA implementation actions associated with the Structured Decision Making (SDM) process as well as the progress toward achieving the anadromous fish doubling goals. The types of monitoring are specified by the SIT to meet the SDM requirements, specifically data to support the Life Cycle Models for all species of Chinook salmon as well as green and white sturgeon in the Central Valley. The Life Cycle Models simulate fish reproduction response to both CVP and other operations as well as the types and amounts of available suitable habitat in the Central Valley. The funding supports programmatic and data management at the Service and Reclamation. Functions include supporting the SIT's Data Management Strategy, preparation of a CVPIA Annual Accomplishment Report, documenting the progress toward the anadromous fish doubling goal; maintaining program databases; maintaining and updating the annual work plan tables; and continuing SIT prioritized 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. \$3,000,000

Anadromous Fish Screen Program (AFSP) - Section 3406(b)(19). 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 would provide for environmental compliance, design, and monitoring activities for fish screen

projects and construction funds for the screening of small diversions. The selection of these projects would be made based on AFSP prioritization criteria which include: willing applicant, cost effectiveness, biological benefits, availability of non-Federal cost-share, and ability to obtain pre-construction monitoring data. \$1,200,000

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. AFRP now uses the Structured Decision Making (SDM) science-based process to support decision making. The SDM process uses the best available science to develop CVPIA priorities for on-the-ground projects that increase anadromous fish production, and closely associated monitoring that supports the science-based decision making process. Reclamation and the stakeholders call for project and monitoring charters that align with the science-based priorities. AFRP established a Science Integration Team (SIT) to conduct the priority identifying portion of the SDM process. The SIT works with local watershed groups and other local partners to advance the science that couples CVP operations with on-the-ground habitat improvements in all Central Valley watersheds. AFRP collaborates with and provides 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 funds go to supporting the SIT, scientific analyses, construction of on-the-ground projects that best meet SIT priorities, legislative mandates, projects that are both a SIT priority and offer significant cost-share opportunities, or projects that meet the goals of the other fish agencies in the Central Valley, as well as the monitoring that supports all of the above. Emphasis in FY 2020 is implementing on-the-ground projects that best meet SIT developed priorities and reorganizing the associated monitoring via the SIT's Data Management Strategy. Types of on-the-ground projects include restoration of side channels on the mainstem Sacramento River, restoration or recreation of rearing habitat on the mainstem Sacramento River and some of its tributaries, restoration of riparian habitat adjacent to aquatic habitat restoration projects, fish screens at selected withdrawal structures, and with the completion of Phase 3C, wrapping up the Clear Creek Conceptual Restoration \$12,627,000 Plan.

<u>Habitat Restoration Program (Other CVP Impacts)</u> - Section 3406(b)(1). Funding would 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 would solicit for targeted research actions that coincide with high priority species recovery actions. Proposals would be solicited on *www.grants.gov*, with new projects selected each year being dependent on the most current species and habitat priorities identified by the Fish and Wildlife Service. \$1,000,000

Dedicated Project Yield - Section 3406(b)(2). Funding would be used to continue efforts associated with the annual dedication and management of 800,000 acre-feet of CVP yield for the primary purpose of anadromous fish restoration as directed by the CVPIA. The Program would implement upstream water management actions that benefit juvenile anadromous fish in their downstream migration; and 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.

Refuge Water Conveyance – Section 3406(d)(1)(2). Funding would 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 nearly 100 percent of Level 2 water to those refuges having full delivery capacity, and projects to convey approximately 54,600 acre feet of acquired Incremental Level 4 water (surface, groundwater and lift pumping). Water quality monitoring at Gray Lodge Wildlife Area would continue. \$16,400,000

Refuge Water Supply, Facility Construction - Section 3406(d)(5). Funding would be used to continue planning and implementation activities for Refuge conveyance facilities. Projects to be funded would primarily support Reclamation's obligation to deliver water supplies to the Mendota Wildlife Area and Pixley National Wildlife Refuge. Specifically, funding would be used for topographical and geological surveys, design, environmental compliance and permitting activities necessary for implementation of preferred alternatives. Outstanding conveyance facility construction needs for the Sutter National Wildlife Refuge and the Grey Lodge Wildlife Area are currently being funded through State of California Proposition 1 grant funding. Additionally, funding would be used for needed repairs and improvements to the East Bear Creek pumping plant. \$3,000,000

Ecosystem/Water Systems Operations Model - Section 3406(g). The purpose of this activity is to develop readily usable and broadly available models and supporting data to evaluate the ecologic and hydrologic effects of existing and alternative management strategies of public and private water facilities and systems in the Sacramento, San Joaquin, and Trinity watersheds. Funding would 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 geographic information system; and evaluate basin wide integrated modeling needs.

\$700,000

Subtotal, Miscellaneous Project Programs, CVP

\$42,127,000

San Joaquin Division, CVP

Water Acquisition Program - Section 3406(d)(2). 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 of California. The CVPIA also requires acquiring water to supplement the quantity of water dedicated under (b)(2) for fish, wildlife and habitat restoration purposes. Funding would be used to acquire and manage Incremental Level 4 water supplies as well as to provide 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 would be acquired within the San Joaquin Valley where most of the wetlands are located. Sources of water would 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. \$8,272,000

<u>Water Acquisition - Instream Flows</u> - Section 3406(b)(3). Funding would be used to acquire water to supplement the quantity of water dedicated under (b)(2) for fish, wildlife and habitat restoration purposes. Efforts would 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

Subtotal, San Joaquin Division, CVP

\$8,572,000

Shasta Division, CVP

<u>Clear Creek Restoration</u> - Section 3406(b)(12). Clear Creek restoration continues to aggressively implement Chinook salmon and steelhead habitat enhancement projects through partnerships with local landowners, public and private agencies, and universities. Funding would provide for continued monitoring juvenile habitat use, spawning area mapping, juvenile habitat suitability indices, gravel quality, survival-to-emergence, fish rescue, benthic macro invertebrate sampling, water quality and water

temperature. The program would implement baseline in-stream spawning gravel placement projects and is anticipated to close-out and monitor Phase 3B and 3C of the planned channel restoration efforts.

\$650,000

Trinity River Division, CVP

<u>Trinity River Restoration</u> - Section 3406(b)(21) and (b)(1) other. Funding would 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 would be used for implementation of three large scale channel rehabilitation projects along the mainstem 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

<u>San Joaquin River Restoration Program</u> – A majority of funding for this effort is provided out of the San Joaquin River Restoration Fund. A detailed description of work proposed in FY 2020 can be found under the Permanent Appropriations tab for that account. Funding is consistent with requirements of P.L. 111-11. \$2,000,000

Reclamation Request

\$54,849,000

FY 2020 California Bay-Delta Restoration - Funding Summary FY 2020 Budget Summary \$000

Project	FY 2019	FY 2020
Troject	Enacted	President's Budget
Renewed Federal State Partnership:	1,700	1,700
Program Management, Oversight and Coordination	1,700	1,700
Smarter Water Supply and Use:	3,835	2,250
Water Conservation Projects	2,250	2,250
Los Vaqueros Expansion Feasibility Study	300	0
Upper San Joaquin River Basin Storage Feasibility Study	75	0
North-of-the-Delta Offstream Storage (Sites Reservoir) Feasibility Study	875	0
Shasta Enlargement Feasibility Study	75	0
San Luis Lowpoint Feasibility Study	260	0
Address Degraded Bay-Delta Ecosystem:	29,465	29,050
California Water Fix (Formerly Bay Delta Conservation Plan)	2,250	2,050
Yolo Bypass Salmonid Habitat Restoration and Fish Passage (California EcoRestore)	1,300	7,400
Interagency Ecological Program	9,515	6,000
CALFED Science Activities (Pelagic Organism Decline)	5,350	5,350
Collaborative Science and Adaptive Management Studies	5,000	4,000
San Joaquin River Salinity Management	3,800	2,000
Program to Meet Standards	750	750
Battle Creek Salmon and Steelhead Restoration Project	1,500	1,500
TOTAL - California Bay-Delta Restoration	35,000	33,000

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 with 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 area. The levees that were built over 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 which are in some places 30 feet below the crests of the levees which protect them.

With most of the State's precipitation falling in the north and the majority of its population residing 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 Title I of Public Law (P.L.) 108-361, the CALFED Bay-Delta Authorization Act (Act) was signed into law. 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.

More information on the Program is available in the Administration's *California Bay-Delta Federal Budget Crosscut* posted here: https://www.whitehouse.gov/omb/budget/Analytical_Perspectives

APPROPRIATION CEILING: Appropriations authorized are \$389 million (October 2004) for new and expanded authorities. The comparable Federal obligation through FY 2020 is \$57.5 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 \$26.3 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 \$22.7 million.

New and expanded authorities authorized by P.L. 108-361 expire September 30, 2019. Appropriation language is proposed in the FY 2020 President's Budget to extend the expiration date for the expiring authorities and appropriations to September 30, 2020.

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; and P.L. 113-235, Consolidated and Further Continuing Appropriations Act, 2015, December 16, 2014; P.L. 114-113, Consolidated Appropriations Act, 2016, December 18, 2015; and P.L. 114-322, Water Infrastructure Improvements for the Nation Act, December 16, 2016.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022 as follows:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Amount of acre feet of water conservation capacity enabled to help address drought **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
California Bay-Delta Restoration	\$35,000,000	\$33,000,000
Enacted/Request	\$35,000,000	\$33,000,000
Prior Year Funds	\$1,422,752	\$0
Total Program	\$36,422,752	\$33,000,000
Prior Year Funds	(\$1,422,752)	\$0
Total Reclamation Allotment	\$35,000,000	\$33,000,000

PROGRAMS AND PROJECTS PROPOSED WORK FOR 2020:

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 with State agencies and other Federal agencies to ensure Program balance and integration, which includes participation in the Delta Plan Inter-agency Implementation Committee; (4) development of interagency cross-cut budgets and coordination with the Delta Stewardship Council on reporting requirements under Section 105 of the CALFED Act; (5) coordination of public outreach and involvement, including tribal and public advisory activities to include the flexibility to utilize external committees in accordance with the Federal Advisory Committee Act (5 U.S.C. App.); and (6) development of annual reports. **\$1,700,000**

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 water conservation with the criteria stated in the Bay-Delta Act, Sec. 103, (d)(3)(A). 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. \$2,250,000

Address Degraded Bay-Delta Ecosystem -

California WaterFix - Continues the implementation of the California WaterFix Adaptive Management Plan, baseline monitoring studies, cost recovery and allocation activities, environmental compliance, and management requirements. \$2,050,000

Yolo Bypass Salmonid Habitat Restoration and Fish Passage - In compliance with the National Marine Fisheries Service 2009 Biological Opinion for the Coordinated Long-term Operation of the CVP and SWP (BiOp), the Yolo Bypass Salmonid Habitat Restoration and Fish Passage project will develop fish passage and ecosystem restoration alternatives. The BiOp requirements include increased juvenile rearing habitat in the Lower Sacramento River area and adult fish passage improvements in the Yolo Bypass. Funding in FY 2020 will be used to award a financial assistance agreement to construct the gated notch and channel improvements currently being planned in the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Environmental Impact Statement/Environmental Impact Report (EIS/EIR). A final EIS/EIR is planned for the beginning of CY 2019 with construction planned to begin over the summer of 2020. Construction costs would be shared by the California Department of Water Resources. \$7,400,000

Interagency Ecological Program (IEP) - Continues funding for monitoring and tracking 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 the 2008 and 2009 Biological Opinions for the Coordinated Long-term Operation of the CVP and SWP. Multiple Federal, State and local agencies use the data, analysis and synthesis that IEP produces. 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 Endangered Species Act (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. Multiple Federal, State and local agencies use the data, analysis and synthesis that IEP produces. Since the POD, the pelagic fish have not recovered, and populations continue to remain at low numbers. Record lows were reached during the 2013 - 2016 drought. 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 2020 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

Collaborative Science and Adaptive Management Studies - Continues monitoring and research activities designed to respond to the recommendations from the Collaborative Science and Adaptive Management Program. These recommended studies focus on science and adaptive management associated with contentious operations issues in the 2008 and 2009 BiOps for the Coordinated Long-term Operation of the CVP and SWP. These studies will improve information for planning and implement activities as part of the Water Infrastructure Improvements for the Nation Act. The monitoring and research performed is in coordination with other local, State, and Federal agencies, to develop and test alternative ways of improving water reliability and protecting ESA species from entrainment by the pumps at the CVP and SWP. These activities include studies on the factors affecting Delta smelt entrainment, the seasonal outflow effects on ESA listed species, the effects of water operations on juvenile salmonid migration and survival in the South Delta, the effects of water temperature on juvenile salmonid survival in the Sacramento River, and rearing habitats for salmonid and smelt in the Delta and Yolo Bypass. These activities will provide new information to fill gaps in structured decision models and life cycle models for ESA listed species that are being used in Federal National Environmental Policy Act (NEPA) and ESA consultations for the Central Valley Project to improve operational flexibility and protect and restore water-related resources. \$4,000,000

San Joaquin River Salinity Management – Continues to provide financial assistance to local districts to help them implement the Westside Regional Drainage Plan (WRDP) that will improve water quality in the lower San Joaquin River and Delta. Funding will be used for source control, groundwater management, re-use of drainage water, environmental mitigation, treatment, and salt disposal. Previous Federal investments in the WRDP have significantly reduced the loads of selenium and salts in the river and adjacent wetlands water supply channels. \$2,000,000

Program 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, 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 Wildlife. Funding will continue to support the construction of Phase 2 (the final project phase), including contract award, construction management, and contract modifications. Phase 2 construction consists of a tunnel tailrace connector; an access road; a fish screen and ladder; four diversion dam removals; and a canal removal.

Subtotal, Address Degraded Bay-Delta Ecosystem

\$29,050,000

Reclamation Request

\$33,000,000

FY 2020 Direct Loan Program Budget Summary

(\$ in thousands)

			FY 2020						
Project or Study	FY 2019	Water & Energy	Land Management	Fish & Wildlife	Facility Operations	Facility Maint.	FY 2020 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 2020 OVERVIEW

	FY 2020 PRESIDENT'S BUDGET					
FY 2019	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 2020 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 \$35 million.

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 and administrative functions that 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>, 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 and Native American Affairs Office with staff located in Washington, DC and Denver, CO; and the Technical Resources group, with management responsibility for the Technical Service 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.

Mission Support Organization, located in Denver, CO, responsible for the management of policy, reporting and oversight for Finance and Accounting, Property and Facilities, Contracts, Acquisition and Financial Assistance, and Financial Business Management Integration.

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., coordinating 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 within the Department's twelve unified regions 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.

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 FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
Policy and Administration	\$61,000,000	\$60,000,000
Enacted/Request	\$61,000,000	\$60,000,000
Total Program	\$61,000,000	\$60,000,000
Total Reclamation Allotment	\$61,000,000	\$60,000,000

WORK PROPOSED FOR FY 2020:

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 which include Cyber Security and the Federal Information Technology Acquisition Reform Act. Less funding is required as a result of Reclamation's initiative to reduce its occupied space at the Denver Federal Center through consolidation, resource sharing, and maximizing efficiencies.

DOI Reorganization Implementation (\$2,300,000/0 FTE) – At the 2020 request level of \$2.3 million, Reclamation will support implementation of the 12 unified regions, relocation of certain headquarters staff and functions West, and modernization of Interior's administrative services. The request will support:

- Implementation of Unified Regions. Funds will support bureau planning and implementation needed to transition to the new regions and implement shared service solutions.
- Modernizing Interior's Business. Deployment of common shared service solutions to improve delivery of human resources, information technology, and acquisition services.

Specifically:

- \$850,000 will support a pilot in Region 7, the Upper Colorado-Basin Region, including:
 - o \$600,000 for cross-bureau collaboration to better deliver mission activities in recreation, conservation, and permitting/NEPA, and
 - o \$250,000 will contribute to Department-wide implementation to stand up the 12 new regions;
- \$1.0 million will support shared services contributions for Reclamation's share of IT interoperability and FBMS enhancements to improve interagency regional coordination; and
- \$450,000 to support Department-wide project management and implementation planning.

Reclamation Request \$60,000,000

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 distribution and collection, 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 operating capital. By design, the fund operates on a self-supporting basis through user charges deposited in the fund. Charges to users are based on rates approximately equal to the costs of furnishing the materials, supplies, equipment, facilities, and services, including labor and related costs and future planned capital needs to ensure full cost recovery.

The specific types of activities covered within the WCF are 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.

Regional/Area Office Support Services – The costs in this activity include those that are not directly charged to a project or beneficiary for administrative services within the region. The types of activities in these support services accounts include human resources, financial management, information technology, acquisitions, general administrative services, supervisory services, and other miscellaneous services. Costs are recovered through an indirect cost rate assessed to benefiting office(s).

Transportation Vehicles – The costs in this activity include the operation, maintenance and replacement of vehicles utilized in the Regional and Area Offices. Costs are recovered through rates charged to users of the vehicles.

Drill Operations – The costs in this activity include the cost for the operation of the drill crew's Dam Safety investigations, design data collection, sampling, coring, and construction programs. It also provides for the operation, maintenance and replacement of the drill equipment. Costs are recovered through rates charged to the users of this service.

Soil & Water Quality Laboratories – The costs in this activity include the cost for laboratory and field testing of soil and water pertaining to construction activities, investigation programs, and project facilities. Water quality monitoring is also provided to assist States, Tribes, Watershed Council, and irrigation/conservation districts in watershed planning and restoration. Costs are recovered through rates charged to the users of this service.

Geographic Information Systems – The costs in this activity include the cost to provide and support computer hardware and software system designed to collect, manage, manipulate, analyze, and display spatially-referenced data. Costs are recovered through rates charged to users of this service.

Underwater Inspection Team – The costs in this activity include costs for the operation of the dive team, supplies, medical screenings and biennial training to maintain safety standards. The dive team provides inspection services for structures in water collection and distribution systems. Costs are recovered through rates charged to the users of this service.

Regional Engineering Offices – The costs in this activity are to provide engineering services at the region related to water resources management. Costs are recovered through rates charged to the users of this service.

Heavy & Mobile Equipment – The costs in this activity include the operation, maintenance and replacement of heavy & mobile equipment for use by area and field office personnel. Costs are recovered through rates charged to users of the vehicles.

Radio VHS System – The costs in this activity are for the system equipment for the Joint Radio System for Reclamation and Fish & Wildlife Services (FWS). It is stated in the contract that all funds from the FWS shall be maintained in the WCF. Costs are recovered through cost share agreements between Reclamation and FWS.

Photogrammetry and Surveys – The costs in this activity are for topography, generating data for pay quantities, digital elevation models, digital terrain models, survey 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. Costs are recovered through rates charged to the users of this service.

Bureau-wide Support Services – The costs in these activities include the costs that are not directly charged to a project or beneficiary for administrative services that benefit all regions and offices. Services include, but not limited to centralized financial services; centralized GIS; financial reporting, accounting and oversight; internal control oversight; human resources oversight; IT services and equipment; and acquisition initiatives. Costs are recovered through an indirect cost rate assessed to benefiting offices.

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.

Bureau-wide Engineering Services – The costs in this activity are to provide 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. Costs are recovered through rates charged to the users of this service.

Departmental Assessments – This activity is used to account for services provided by the Department of the Interior's Office of the Secretary (IOS) and the Interior Business Center (IBC). These services include support services, managed activities, and other services assessed to Reclamation through IOS and IBC's Centralized and Direct Billing process. Costs are recovered through an indirect cost rate assessed to benefiting offices.

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

Activity	FY 2019	FY 2020 President's Budget
Revenue	\$491,072,151	\$501,898,825
Prior Year Funds	\$108,865,560	\$82,022,368
Unobligated Balance, End of Year*	(\$82,022,368)	(\$81,480,405)
Total Program	\$517,915,343	\$502,440,788

^{*}This represents funds needed for expenditures that are planned in future years.

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; Reclamation Water Settlement Fund; San Joaquin River Restoration Fund; and three Miscellaneous Permanent Appropriations (Klamath Reclamation Area, Operation and Maintenance of Quarters, and one within the North Platte Project).

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 2020: 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 power plant 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 power plant 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 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Mission Area 2: Generating Revenue and Utilizing Our Natural Resources

Goal #1: Ensuring Energy and economic security for America

Measure: Percent of hydropower facilities in good condition as measured by the Facility Reliability Rating (FRR)

Measure: Percent of time that Bureau of Reclamation hydroelectric generating units are available to the interconnected Western electrical system during daily peak demand periods

Mission Area 6: Modernizing Our Organization and Infrastructure for the Next 100 Years Goal #3: Prioritize DOI infrastructure needs and reduce deferred maintenance backlog Measure: Amount of priority deferred maintenance (repair) needs/activities addressed

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 ensuring 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:

- Replacement of cast steel wicket gates with stainless steel wicket gates: The result is thinning of the wicket gate cross section and increase of the servomotor stroke. This increases the total gate opening which increases capacity. It also reduces friction to flow which increases efficiency.
- Replacement of worn crown plates and wicket gate bushings: Reduces leakage through the units while motoring or shut down. It also reduces or eliminates wear plate cavitation and reduces outage time due to shear pin breakage.
- Replacement of seal rings: Contributes to turbine efficiency.
- Purchase and install 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 to deliver water and generate power.

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget ^{3/}
Water and Energy Management and Development	\$12,778,000	\$12,779,000
Facility Operation	\$66,334,000	\$67,865,000
Facility Maintenance and Rehabilitation	\$13,696,000	\$21,353,000
Total Obligations	\$92,808,000	\$101,997,000
Unobligated Balance Available, Start of Year ^{1/}	(\$50,401,255)	(\$54,861,279)
Unobligated Balance Available, End of Year	\$50,401,255	\$54,861,279
Impact of Sequestration	\$32,000	\$496,000
Receipts Unallocated		(\$5,340,000)
Budget Authority	\$92,840,000	\$97,153,000
Total BOR Appropriation-Permanent Indefinite	\$92,840,000	\$97,153,000
Balance, end of year	\$0	\$0
Total Revenues ^{2/}	\$92,840,000	\$97,153,000

^{1/} Includes Post-Retirement Benefits and Working Capital Fund.

WORK PROPOSED FOR FY 2020:

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 (\$404,000), principal payment to the Treasury (\$575,000), 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). \$12,779,000

Facility Operations - Continues operation, preventive maintenance, and administrative support functions of the project to facilitate water and power deliveries. Includes Reclamation and Western water and power operations, forecasting, water scheduling, hazardous materials management, river telemetry, policy/regulation, and communications. Provides guides, security, and support for visitor services. The increase is due to higher estimates for salaries, materials and services. \$67,865,000

Facilities Maintenance and Rehabilitation - Continues non-routine maintenance activities and replacements to infrastructure and structural facilities. Continues work rebuilding and replacing generator coolers; replacing flow meters; replacing wearing elevator motors and controllers; and replacing 480-volt switchgear. Begins work replacing drum gates and seals; replacing governor oil pumps; replacing UCM components; replacing wastewater treatment facility; and replacing the central HVAC system. Continues power plant piping maintenance; crane inspections and repairs, generator life extension; and tail bay stop log corrosion removal. Begins rebuilding intake tower gearbox and boring mill; repairing paradox valves; repairing slope erosion; resolving fire egress route issues; and replacing by-pass bridge restrooms. The increase is due to increased replacement items. \$21,353,000

Total Obligations
Impact of Sequestration
Receipts Unallocated

Total Appropriations, Permanent Indefinite (Non-Appropriated)

\$21,525,000
\$101,997,000
\$496,000
\$5,340,000
\$97,153,000

²/ Includes Principal Repayment (\$557,000 in FY 2019 and \$575,000 in FY 2020).

^{3/} A portion of this appropriation ("administrative expenses") is subject to sequestration.

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 2020 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

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. \$550,000

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. \$250,000

APPROPRIATION:

FY 2020 \$823,000 FY 2019 \$497,000

Appropriation amounts include the impact of sequestration.

Reclamation Water Settlements Fund

LOCATION: New Mexico, Montana, Arizona, others.

DESCRIPTION/JUSTIFICATION: The Reclamation Water Settlement Fund (43 U.S.C. 407) was established in the Treasury by Public Law 111-11.

For each fiscal year from 2020-2029, the Secretary of the Treasury is to deposit \$120 million per year of revenues that would otherwise be deposited for the fiscal year in the Reclamation Fund. Those funds are available without further appropriation and may be expended from 2020-2034.

The priority for expending these funds is outlined in the statute, as follows:

- I. Navajo-Gallup Water Supply [Mandated to be fully appropriated by December 2024]
- II. Other New Mexico Settlements:
 - Aamodt Litigation Settlement [Mandated to be fully appropriated by June 2024]
 - Taos Pueblo Indian Water Rights [Fully funded]
- III. Montana Settlements:
 - Blackfeet Water Rights Settlement [Mandated to be fully appropriated by January 2025]
 - Crow Tribe Water Rights Settlement [Mandated to be fully appropriated by June 2030]
 - Ft. Belknap Indian Reservation (if settlement is authorized by December 31, 2019)
- IV. Arizona Settlement:
 - Navajo Nation Lower Colorado River basin (if settlement is authorized by December 31, 2019)

Reclamation has initiated arrangements with the Department of the Treasury as well as other appropriate bureaus and offices within the Department of the Interior for the new funding to be ready and available on October 1, 2019, as required. The allocation of the first year of funding is pending; however, predicated on both the mandated priority and the required date for the project to be fully funded, at least \$97.4 million of the \$120 million in FY 2020 is expected to be allotted to the Navajo-Gallup Water Supply project.

AUTHORIZATION: P.L. 111-11, Omnibus Public Lands Management Act of 2009, March 30, 2009, Sec. 10501.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water facility infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

Measure: Amount of acre feet of water conservation capacity enabled to help address drought

WORK PROPOSED FOR FY 2020:

The specific tasks to be undertaken with the \$120 million include those specified in the Navajo-Gallup Water Supply project (see section above). Additional tasks will be enumerated in a Spend Plan to follow, once legal and other requirements have been analyzed fully.

Total Appropriations, Permanent Indefinite (Non-Appropriated)

\$120,000,000

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 (Title X, Subtitle A, Part I of P.L 111-11) created the San Joaquin River Restoration Fund (Fund). Funds deposited into the Fund include the Friant Division Surcharges, Capital Component, Water Sale Proceeds, and certain other non-Federal funds. Section 10009(c)(2) of the San Joaquin River Restoration Settlement Act (Title X, Subtitle A, Part I of P.L 111-11) authorized all funds deposited into the Restoration Fund from the Friant Division Surcharges, Capital Component, and Water Sale Proceeds for appropriation except that \$88 million is available for expenditure without further appropriation. Section 10009(c)(2) went on to identify that "provided that after October 1, 2019, all funds in the Fund shall be available for expenditure without further appropriation."

AUTHORIZATION: San Joaquin River Restoration Settlement Act (Act), Title X of P.L. 111-11, Omnibus Public Land Management Act of 2009, dated March 30, 2009.

PERFORMANCE IMPROVEMENT: This project is aligned with the Department of the Interior Strategic Plan for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high- and significant-hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget
San Joaquin River Restoration Fund allocations	\$0	\$207,356,380
Other Federal ^{1/}	\$37,500,000	\$30,264,000
Total Program	\$37,500,000	\$237,620,380
Other Federal	(\$37,500,000)	(\$30,264,000)
Total Reclamation Allotment of Mandatory Funds	\$0	\$207,356,380

^{1/} Other Federal in FY 2020 includes discretionary funding in the amounts of \$2,000,000 from the Central Valley Project Restoration Fund and \$28,264,000 within the Central Valley Project, Friant Division of the Water and Related Resources account.

Anticipated Receipt Allocations

Receipt Allocation	FY 2019	FY 2020 ^{1/}
Friant Division Surcharges, 3406(c)(1) ^{2/}	\$0	\$30,073,228
Non-Federal – Capital Component	\$0	\$150,614,000
Non-Federal – Water Sale Proceeds	\$0	\$26,669,152
Total Anticipated Receipt Allocations	\$0	\$207,356,380

¹/ In FY 2020, anticipated receipts represent actual receipts through FY 2018 and anticipated receipts collected in FY 2019 that are available October 1, 2019 without further appropriation. Anticipated receipts include deposits from the Friant Division Surcharges, Capital Component, and Water Sale Proceeds.

WORK PROPOSED FOR FY 2020:

Fish and Wildlife Management and Development

Administration and Program Management - Funds would be used for Program-wide tracking of schedules, finances, and data management; oversight and coordination of Program activities; quarterly and annual reporting; and coordination of public outreach and involvement. \$4,834,000

Water and Related Resources Request (\$3,830,000)

\$1,004,000

Restoration Goal Activities - Request includes funds to continue construction of the Mendota Pool Bypass component of the Mendota Pool Bypass and Reach 2B Channel Improvements Project. Funds in FY 2020 would be used for construction and land acquisition actions. The Mendota Pool Bypass component of this project implements one of the highest priority projects identified in the Settlement and includes the creation of a bypass channel around Mendota Pool to prevent fish entrainment in the water diversion facilities in the pool. Request includes funds for construction of the Arroyo Canal Fish Screen and Sack Dam Fish Passage Project which implements two of the highest priority projects identified in the Settlement. The project includes a fish screen on the Arroyo Canal to prevent entrainment of juvenile Chinook salmon in the canal and modifications to Sack Dam to allow for fish passage around the structure. Funds would be used to continue the fisheries reintroduction program including operation and

² Friant Division Surcharges authorized in Reclamation Projects Authorization and Adjustments Act of 1992, Title XXXIV of P.L. 102-575, section 3406(c)(1), October 30, 1992.

maintenance of the Salmon Conservation and Research Facility, donor stock collection, and genetics monitoring. \$199,505,000

Water and Related Resources Request \$(\$8,749,000)\$

Central Valley Project Restoration Fund \$(\$2,000,000)\$

\$188,756,000

Flow-Related Activities - 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. In FY 2020, the Program is focusing on completing seepage management actions necessary to allow for up to 1,500 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 this flow and anticipates implementing physical projects or realty actions as designs and appraisals are completed. \$15,685,000

Water and Related Resources Request (\$15,685,000)

90

Water Management Goal Activities – Water Management Goal Activities – A feasibility study is nearing completion for the Friant-Kern and Madera Canal Capacity Restoration projects. These two projects would restore a portion of the lost 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 and reduce or avoid impacts that would otherwise occur with the implementation of the Settlement. Upon completion and Administration review of that study, and contingent on a determination of feasibility, Reclamation plans to proceed with construction of the project. The FY 2020 restoration funds planned use will be within the scope and funding level authorized under the San Joaquin River Restoration Settlement Act (P.L. 111-11). Request includes funds for a variety of Program actions, including the following: recapture and recirculation activities; recovered water account tracking; water management goal oversight; and planning activities on the Friant-Kern Canal Reverse Flow Facilities.

§17,596,380

Reclamation Permanent Authority

\$207,356,380

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

8			
Expenditures	FY 2020 President's Budget	Revenues	FY 2020 President's Budget
Lower Colorado River Basin Development Fund			
Colorado River Basin Project	50,892,000	Colorado River Basin Project	50,892,000
Navajo Generating Station - O&M	49,295,000	Navajo Generating Station - Power Sales	10,000,000
Environmental Commitments & O&M Oversight	1,597,000	CAWCD Power Usage Payments	40,892,000
Arizona Water Settlement Act	103,988,000	Arizona Water Settlement Act	103,988,000
		CAP Project Repayment	103,988,000
Colorado River Basin Salinity Control Program (CRBSCP) ^{1/}	9,400,000	Colorado River Basin Salinity Control Program (CRBSCP)	9,400,000
Contributions to Title II ^{1/}	3,859,000	Miscellaneous Sources	9,400,000
Contributions to USDA	5,541,000		
Total LCRBDF	164,280,000		164,280,000
Upper Colorado River Basin Fund Dolores	615,000	Dolores	615,000
Initial Units, Colorado River Storage Project (CRSP)	74,537,000	Initial Units, Colorado River Storage Project (CRSP)	74,537,000
Colorado River Basin Salinity Control Program (CRSP)	1,968,000	Colorado River Basin Salinity Control Program (CRSP)	1,968,000
CRBSCP, Contributions to Title II ^{1/}	972,000	CRBSCP, Contributions to Title II ^{1/}	972,000
CRBSCP, Contributions to USDA	996,000	CRBSCP, Contributions to USDA	996,000
Evaluation of Existing Dams	50,000	Evaluation of Existing Dams	50,000
Central Utah Project	1,193,000	Central Utah Project	1,193,000
San Juan-Chama	180,000	San Juan-Chama	180,000
Seedskadee Project	3,083,000	9	3,083,000
Total Program	81,626,000	Total Program	81,626,000
Non-Federal	-375,000	Non-Federal	-375,000
Total – UCRBF	81,251,000	Total – UCRBF	81,251,000

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, near Page, Arizona.

DESCRIPTION/JUSTIFICATION: The Lower Colorado River Basin Development Fund (Development 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 (CRBA). The CRBA authorized the United States' participation in the Navajo Generating Station (NGS), to provide cost-effective power to operate the CAP pumping plants that deliver Colorado River water to central and southern Arizona. Reclamation has an entitlement to 546.75 megawatts of power (24.3 percent) from the NGS, which is a 2,250-megawatt coal-fired steam plant operated by the Salt River Project. Power entitled to Reclamation that is not needed to operate the CAP is sold at market rates, and revenues from the sale of surplus power are deposited into the Development Fund to pay for CAP operations and maintenance, and to aid in the repayment of the CAP. The CRBA was amended by Title I of P.L. 108-451, the Arizona Water Settlements Act (AWSA), which authorizes the use of Development Fund revenues to also fund Indian water rights settlements and other purposes identified in the AWSA. The earnings from these investments as well as CAP repayment obligations are also deposited in the Development Fund.

Due to competitive pricing of power generation using natural gas in recent years, surplus NGS power revenues have decreased significantly. In 2017, the non-Federal co-owners of NGS decided to close the plant unless a buyer came forward to purchase it and continue operations. Despite a concerted search effort over the past 2 years, no willing buyer or new operator has come forward, and the plant is scheduled to cease operations on December 22, 2019, near the end of the first quarter FY 2020. A 5-year decommissioning plan followed by a 30-year monitoring plan are under preparation. All the NGS participants, including Reclamation, are expected to pay their respective shares of the decommissioning and monitoring costs. For Reclamation, these costs will be treated as CAP operations and maintenance costs. The Central Arizona Water Conservation District (CAWCD) is the operating agent of the CAP. Consistent with CAWCD's operating and maintenance and other agreements with Reclamation on behalf of the Secretary of the Interior, CAWCD will be responsible for making arrangements for the power needs to continue operation of the CAP after December 22, 2019. CAWCD has already entered into several Power Purchase Agreements with other power generators, in anticipation of NGS' closure.

AUTHORIZATION: P.L. 90-537, Colorado River Basin Project Act, September 30, 1968, as amended by P.L. 97-373, 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 Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted	FY 2020 President's Budget ^{1/}
Facility Operations	\$166,540,000	\$50,892,000
Total Program	\$166,540,000	\$50,892,000
Applied Revenues	(\$166,540,000)	(\$50,892,000)
Total Reclamation Allotment	\$0	\$0

¹/ 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 Department of the Treasury for project repayment was suspended for 10 years beginning December 1, 2003. The United States Congress promulgated this suspension in anticipation of the enactment of the Arizona Water Settlements Act, P.L. 108-451, which was signed on December 10, 2004, to revise 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 Development Fund and available for use, beginning January 2010 for the purpose defined in the AWSA. As a result of the aforementioned NGS closure after 1Q FY2020, revenues are lower than in FY2019.

WORK PROPOSED FOR FY 2020:

Facility Operations - Continues the operation and maintenance functions of the NGS, long-term environmental commitments, and Federal oversight of the project. \$50,892,000

Revenues (\$50,892,000)

Reclamation Request \$0

Lower Colorado River Basin Development Fund Arizona Water Settlements Act

LOCATION: Facilities and activities associated with the Arizona Water Settlements Act (AWSA) are located in central and southern Arizona and western New Mexico.

DESCRIPTION/ JUSTIFICATION: The AWSA resolved the water rights claims of the Gila River Indian Community (GRIC) and the San Xavier District and the Schuk Toak District of the Tohono O'odham Nation, through amendments to the Southern Arizona Water Rights Settlement Act of 1982. The AWSA also serves as the implementing legislation to resolve operations and repayment issues associated with the Central Arizona Project (CAP) in Arizona. The AWSA amended the Colorado River Basin Project Act to authorize the Lower Colorado River Basin Development Fund (Development Fund) to be used as the funding mechanism for all authorized components of the AWSA. 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 AWSA. Beginning January 2010, these funds were available without further appropriation for the specified purposes identified in the AWSA.

The AWSA authorized the following activities to be funded from revenues retained in the Development 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 GRIC 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 (SAWRSA), 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, To 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 Update for FY 2018-2022:

Mission Area 1: Conserving Our Land and Water

Goal #2: Manage DOI water storage and delivery to resolve conflicts and expand capacity **Measure:** Percent of water infrastructure in good condition as measured by the Facility Reliability Rating (FRR) [high-and significant hazard dams]

SUMMARIZED FINANCIAL DATA

Program Financial Data

Activity	FY 2019 Enacted ^{1/}	FY 2020 President's Budget ^{1/}
Water and Energy Management and Development	\$87,111,000	\$75,998,000
Facility Operations	\$28,000,000	\$28,000,000
Total Program	\$115,111,000	\$103,988,000
LCRBDF – AWSA Revenues	(\$115,111,000)	(\$103,988,000)
Total Reclamation Allotment	\$0	\$0

¹/ A portion of this appropriation ("administrative expenses") is subject to sequestration.

WORK PROPOSED FOR FY 2020:

Water and Energy Management and Development -

GRIC SCIP Rehabilitation and GRIC Pima-Maricopa Irrigation Project (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 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 AWSA, Reclamation will continue funding for rehabilitation of the SCIP works.

The P-MIP is a joint works system that will convey water from the turnout on the CAP aqueduct and water from the San Carlos Irrigation Project to the reservation lands to be served. 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 Community will continue program administration for all the Tribal contractor programs and continue construction of the P-MIP components. Less funding is requested due to the fixed construction schedule and updated actual indexing of project construction funding.

GRIC SCIP Rehabilitation	\$19,598,000
GRIC P-MIP	\$14,000,000
	\$33,598,000

San Carlos Irrigation and Drainage District (SCIDD) Lining - The SCIDD will continue design, environmental clearance, and construction on the lining and rehabilitation of the non-Indian features of the SCIP. The increase is due to construction, oversight and National Environmental Policy Act (NEPA) activities.

\$14,450,000

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.

\$5,000,000

SAWRSA Distribution System - The authorized San Xavier Cooperative Farm extension will be constructed adjacent to the rehabilitated Cooperative Farm which will add about 1,100 acres. Continues design, NEPA, and construction activities. Less funding is requested due to a delay in preconstruction activities.

\$10,000,000

<u>Firming Costs</u> - The Secretary of the Interior is required to firm 28,200 acre-feet of non-Indian agricultural priority CAP 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 AWSA. Funds will be used to purchase, if available, and store excess CAP water in a State of Arizona approved Recharge Facility 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 SAWRSA 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 for the cost of construction or other water utilization alternatives permitted by the AWSA. \$9,040,000

Reclamation Oversight - Reclamation was given the responsibility to provide oversight for the construction projects authorized under Section 203 of the AWSA. These construction projects are the rehabilitation of the Indian and non-Indian components of the SCIP. Reclamation's cost to oversee, administer, and distribute funding from the Development Fund is also provided for in the AWSA.

\$400,000

Other CAP IDD Systems, Yavapai Apache - Camp Verde - Continues project designs, NEPA activities and the evaluation of alternatives. \$500,000

<u>Tohono O'odham - Sif Oidak</u> - Continues project designs and feasibility level analysis. Increase is due to the continuation of feasibility analysis. \$500,000

Subtotal, Water and Energy Management and Development

\$75,988,000

Facility Operations - Payment of Fixed OM&R Costs - Section 107 (a)(2)(A) of the AWSA authorizes the Secretary to "pay annually the fixed operation, maintenance, and replacement charges associated with the delivery of Central Arizona Project water held under long-term contracts for use by Arizona Indian tribes."

Subtotal, Facility Operations

\$28,000,000

Revenues (\$103,988,000)

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 authorized by P.L. 106-392.

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

Activity	FY 2019 Enacted ^{1/}	FY 2020 President's Budget ^{1/}
Water and Energy Management and Development*	\$2,045,000	\$1,968,000
Land Management and Development	\$682,000	\$700,000
Facility Operations	\$46,310,000	\$48,118,000
Facility Maintenance and Rehabilitation	\$29,382,000	\$30,465,000
Total Reclamation Amount	\$78,419,000	\$81,251,000
Non-Federal	\$343,000	\$375,000
Prior Year Funds	\$0	\$0
Total Program	\$78,762,000	\$81,626,000
Prior Year Funds/Non-Federal	(\$343,000)	(\$375,000)
Revenues	(\$78,419,000)	(\$81,251,000)
Total Reclamation Request	\$0	\$0

¹/A portion of this appropriation ("administrative expenses") is subject to sequestration.

WORK PROPOSED FOR FY 2019:

Water and Energy Management and Development - Continues compliance with P.L. 104-127 authorizing cost sharing in lieu of repayment for the Salinity Program. \$1,968,000

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. \$700,000

Facility Operations - Continues tasks to ensure the continued 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. \$48,493,000

Non-Federal (State of Wyoming for Fontenelle Dam and Reservoir) (\$360,000) Non-Federal (Farmington Power Operations of Farmington, NM for the (\$15,000)

Navajo Dam and Reservoir)

Subtotal, Facility Operations

\$48,118,000

^{*} Prior to FY2019, approximately \$21.4 million was funded from Revenue Financed Programs (Power Revenues) for this work annually. The FY 2019 President's Budget directed these revenues be returned to Treasury. The work was funded in FY 2019 with discretionary funding received in the FY 2019 Energy and Water Development appropriations bill (P.L. 115-244, section 505), for "an additional amount for "Department of the Interior-Bureau of Reclamation-Water and Related Resources", ...to carry out environmental stewardship and endangered species recovery efforts pursuant to the Grand Canyon Protection Act of 1992 (Public Law 102-575), Public Law 106-392, the Colorado River Basin Project Act (43 U.S.C. 1551(b)), and the Act of April 11, 1956 (commonly known as the "Colorado River Storage Project Act") (43 U.S.C. 620n)." The request for funding for this work is included in Water and Related Resources for FY 2020. See "Colorado Basin Activities" for more information.

Upper Colorado River Basin Fund Colorado River Storage Project Revenues

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. \$30,415,000

<u>Safety Examination of Existing Dams</u> - Continues tasks for the Initial Units. <u>\$50,000</u>

Subtotal, Facility Maintenance and Rehabilitation

\$30,465,000

Non-Federal (Revenues) (\$81,251,000)

Reclamation Request \$0

Appropriations Language for FY 2020

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, [\$1,391,992,000]\$962,000,000, to remain available until expended, of which [\$67,393,000]\$91,332,000 shall be available for transfer to the Upper Colorado River Basin Fund and [\$5,551,000]\$5,023,000 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 \$10,000,000 shall be available for transfer into the Blackfeet Water Settlement Implementation Fund established by section 3717 of Public Law 114-322: Provided further, That the unobligated balances in "Water and Related Resources" for the Blackfeet Water Rights Settlement Act may be transferred to the Blackfeet Water Settlement Implementation Fund account; Provided further, That such transfers may be increased or decreased within the overall appropriation under this heading: Provided further, That within available funds, \$250,000 [shall]may be for grants and financial assistance for educational activities: *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 the funds were 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.

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, [\$62,008,000]\$54,849,000, 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.

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, [\$35,000,000]\$33,000,000, 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.

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, [2020]2021, [\$61,000,000]\$60,000,000 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.

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.

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 or subsequent 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 [2019]2020, 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] *notification 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] *notification 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] *notification 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) \$400,000 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] *notification 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] *notification 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. Hereinafter, notwithstanding any other provision of law, during the period from November 1 through April 30, water users may use their diversion structures for the purpose of recharging the Eastern Snake Plain Aquifer, when the Secretary, in consultation with the Advisory Committee and Water District 1 watermaster, determines there is water available in excess of that needed to satisfy existing Minidoka Project storage and hydropower rights and ensure operational flexibility.]
- [SEC. 204. Section 9001(d) of the Omnibus Public Land Management Act of 2009 (Public Law 111–11; 123 Stat. 1295) is amended by striking "10" and inserting "20".]
- [SEC. 205. (a) Section 206(c)(2) of the Energy and Water Development and Related Agencies Appropriations Act, 2015 (43 U.S.C. 620 note; Public Law 113–235) is amended by striking "2018." and inserting the following: "2022: Provided, That the Secretary shall not fund pilot projects in the Upper Colorado River Basin without the participation of the Upper Colorado River Division States, acting through the Upper Colorado River Commission.".

- (b) Section 9504(e) of the Secure Water Act of 2009 (42 U.S.C. 10364(e)) is amended by striking "\$450,000,000" and inserting "\$480,000,000".]
- [SEC. 206. Section 9 of the Fort Peck Reservation Rural Water System Act of 2000 (Public Law 106–382; 114 Stat. 1457, 123 Stat. 2856, 128 Stat. 164) is amended by striking "2020" each place it appears in subsections (a)(1) and (b) and inserting "2026".]
- SEC. 203. Title I of Public Law 108-361 (the CALFED Bay-Delta Authorization Act) (118 Stat. 1681), as amended by Section 4007(k) of Public Law 114-322, is amended by striking "2019" each place it appears and inserting "2020".
- SEC. 204. Animas-La Plata Deferred Construction Funding. There is hereby authorized to be appropriated the total amount of \$4,000,000 for one payment to provide deferred construction funding to the Navajo Nation for the purpose of fulfilling the construction obligations as described in section 15(b) of the Colorado Ute Indian Water Rights Settlement Act of 1988 (Public Law 100-585), as amended by the Colorado Ute Settlement Act Amendments of 2000 (Public Law 106-554), and to complete the commissioning and title transfer of the Navajo Nation Municipal Pipeline.
- SEC. 205. Omnibus Public Land Management Act of 2009 (P.L. 111-11)--Rio Grande Pueblos, New Mexico Section 9106(g)(2) is amended by striking "2019" and inserting "2020". (Energy and Water Development and Related Agencies Appropriations Act, 2019.)

Appropriations Language for FY 2020 Department of the Interior Bureau of Reclamation

EXPLANATION OF CHANGES IN APPROPRIATIONS LANGUAGE FISCAL YEAR 2020

BUREAU OF RECLAMATION

WATER AND RELATED RESOURCES

Add the following proviso:

Blackfeet Indian Water Rights Settlement –

...; Provided, That \$10,000,000 shall be available for transfer into the Blackfeet Water Settlement Implementation Fund established by section 3717 of Public Law 114-322: Provided, That the unobligated balances in "Water and Related Resources" for the Blackfeet Water Rights Settlement Act may be transferred to the Blackfeet Water Settlement Implementation Fund account: ...

The Blackfeet Water Settlement Implementation Fund, as authorized in the Water Infrastructure Improvements for the Nation Act, requires the accrual of interest on funding in the Blackfeet Water Settlement Fund. This technical amendment would (1) transfer FY 2020 funding into the new account, and (2) transfer funding appropriated in FY 2018 and 2019 into the new account in order for it to accrue interest. See section 3716(d) of P.L. 114-322, as follows:

- (d) MANAGEMENT AND INTEREST.—
- (1) MANAGEMENT.—The Secretary shall manage, invest, and distribute all amounts in the Trust Fund in a manner that is consistent with the investment authority of the Secretary under— (A) the first section of the Act of June 24, 1938 (25 U.S.C. 162a); (B) the American Indian Trust Fund Management Reform Act of 1994 (25 U.S.C. 4001 et seq.); and (C) this section.

GENERAL PROVISIONS – DEPARTMENT OF THE INTERIOR

Delete the following provisos:

[SEC. 203. Hereinafter, notwithstanding any other provision of law, during the period from November 1 through April 30, water users may use their diversion structures for the purpose of recharging the Eastern Snake Plain Aquifer, when the Secretary, in consultation with the Advisory Committee and Water District 1 watermaster, determines there is water available in excess of that needed to satisfy existing Minidoka Project storage and hydropower rights and ensure operational flexibility.]

This change removes language included in the 2019 Energy and Water Appropriations Act of 2019. This language is permanent and need not be repeated.

[SEC. 204. Section 9001(d) of the Omnibus Public Land Management Act of 2009 (Public Law 111–11; 123 Stat. 1295) is amended by striking "10" and inserting "20".]

This change removes language included in the 2019 Energy and Water Appropriations Act of 2019. This provision extended the authorization for the Boise Area Feasibility Study for an additional ten years. The provision is no longer needed.

[SEC. 205. (a) Section 206(c)(2) of the Energy and Water Development and Related Agencies Appropriations Act, 2015 (43 U.S.C. 620 note; Public Law 113–235) is amended by striking "2018." and inserting the following: "2022: Provided, That the Secretary shall not fund pilot projects in the Upper Colorado River Basin without the participation of the Upper Colorado River Division States, acting through the Upper Colorado River Commission.".

(b) Section 9504(e) of the Secure Water Act of 2009 (42 U.S.C. 10364(e)) is amended by striking "\$450,000,000" and inserting "\$480,000,000".]

This change removes language included in the 2019 Energy and Water Appropriations Act of 2019. This provision is no longer needed.

[SEC. 206. Section 9 of the Fort Peck Reservation Rural Water System Act of 2000 (Public Law 106–382; 114 Stat. 1457, 123 Stat. 2856, 128 Stat. 164) is amended by striking "2020" each place it appears in subsections (a)(1) and (b) and inserting "2026".]

This change removes language included in the 2019 Energy and Water Appropriations Act of 2019. This provision extended the authorization for appropriations for the project for six years. The provision is no longer needed.

Add the following proviso:

Sec. XXX. Title I of Public Law 108-361 (the CALFED Bay-Delta Authorization Act) (118 Stat. 1681), as amended by Section 4007(k) of Public Law 114-322, is amended by striking "2019" each place it appears and inserting "2020".

This extension of the CALFED authorization act is needed to support the FY 2020 budget. This language would revise CALFED to extend through FY 2020.

Add the following proviso:

Sec. XXX. Animas-La Plata Deferred Construction Funding. – There is hereby authorized to be appropriated the total amount of \$4,000,000 for one payment to provide deferred construction funding to the Navajo Nation for the purpose of fulfilling the construction obligations as described in section 15(b) of the Colorado Ute Indian Water Rights Settlement Act of 1988 (Public Law 100-585), as amended by the Colorado Ute Settlement Act Amendments of 2000 (Public Law 106-554), and to complete the commissioning and title transfer of the Navajo Nation Municipal Pipeline.

The language allows a one-time authorization of appropriations for the Animas-La Plata Project to complete its Federal construction obligation to the Navajo Nation. The \$4.0

million will be used to complete the commissioning of the Navajo Nation Municipal Pipeline (NNMP) and the deferred construction of water storage tanks, and to complete the commissioning of the NNMP and transfer stipulations for title transfer to the Navajo Tribal Utility Authority. This would complete the construction requirements for the Animas La Plata project.

Amend the following proviso:

SEC. XXX. Omnibus Public Land Management Act of 2009 (P.L. 111-11)--Rio Grande Pueblos, New Mexico – Section 9106(g)(2) is amended by striking "2019" and inserting "2020".

The language would enable Reclamation to continue its participation in the Rio Grande Pueblos project.

Table of Contents Appendix

Report	Page
Table of Contents	Appendix - 01
Benefit Cost Ratios as of October 1, 2020	Appendix - 02
Land Certification	Appendix - 04
Obligations by Function for Operating Projects	
Pacific Northwest Region	Appendix - 06
Mid-Pacific Region	
Lower Colorado Region	Appendix - 09
Upper Colorado Region	Appendix - 10
Great Plains Region	Appendix - 13
Project Repayment FY 2019	Appendix - 17
Reclamation Construction Program	Appendix - 23
Repayment of Irrigation Investment	Appendix - 24
Status of NEPA Compliance	Appendix - 27
Status of Water Service and Repayment Contracts	Appendix - 37
* *	* *

BENEFIT COST RATIOS AS OF OCTOBER 2020

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.

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.
Minidoka Northside Drain Water Management Project		Not Applicable. Action provides for environmental compliance on an existing project.
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 2020

Reclamation is required by statute to conduct, assess and determine the irrigation suitability of Project lands (i.e. land certification) to support authorization and construction of new projects, new blocks/units, or inclusion of land into operating projects which include an irrigation purpose and involve the expenditure of Federal funds to provide the contracted irrigation water or where certification is required by contract language to effect a change in water distribution.

Project	Original Certification	Additional Information
Central Arizona Project	4/16/73	The projectwide land certification was completed on April 16, 1973. During project construction, supplemental land certifications were completed on lands not included in the original projectwide certification. As of July 20, 1998, sufficient land was 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 2020 due to an extension in the completion of planning work. Final land classification for the Sif Oidak District of the Tohono O'odham Nation will be pursued following resolution on the remediation of Formerly Used Defense Site issues. Land certifications for the remaining Indian reservations will be scheduled as required.
Central Valley Projects (CVP): 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.

Land Certification 2020

Project	Original Certification	Additional Information
Pick-Sloan Missouri Basin Project Garrison Diversion Unit	3/66	It is the policy of the Great Plains Region that land classification will only be required for new projects, new diversion or units of projects, or inclusion of land into operating projects which involve the expenditure of additional Federal funds to provide the contracted water service or where land classification/reclassification is required by contract language to effect a change in water distribution.
Pick-Sloan Missouri Basin Project Garrison Diversion Unit		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. The 5,000 acres for the Oakes Test Area were recertified in April 1981 because of the change from gravity to sprinkler irrigation. Recertification is not required on those lands that are a part of the 75,480 acre plan that will not involve the expenditure of additional Federal funds for construction.

THE									Operating	Expenses								Non-Or	perating	To	tal		Projec	t Total
The control of the co	PN REGION	Irrig	ation			_			&I	F8									nses 1/		ations			
The standard of the standard o						FY 2019		FY 2019	FY 2020	FY 2019		FY 2019	FY 2020					FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2019	FY 2020
Very Note No. 1962	Boise Area Projects				6,208			0	0							2,540		0	0	24,801	12,169			
Other Agents 19.0 1				37		643	717				532	540		1,662		2,208	1,799					0	6,135	5,051
Series Se		692	812								3		25		50									
Second Column	Other Agencies			17,547	6,208					17	20	75				332				17,971	6,228			
Second Column																								
West Professors 1,600 1,757 1,500 1,50		8,003	9,752									0	0	0	0			0	0					
Out spanes	Federal			4,280	9,464	2,861	3,194	17	19	1,502	1,419					200	150					0	8,860	14,246
Tree series and the series and se	Water Users	8,003	9,752																					
Internation	Other Agencies			218,450	170,083											50				218,500	170,083			
Internation																								
Was Care	Columbia Basin-Ephrata			0	0													0	0					
Other Agendase	Federal					580	553	115	100	25	20	3,940	714	546	530	2,705	2,860			12,399		0	12,399	6,417
Seed to Prent 10	Water Users	2,685	2,777																	2,685	2,777			
Finder Fi	Other Agencies											25	25	300	200					325	225			
Finder Fi																								
Where Profess	Crooked River Project	0	0	0	0			0	0									0	0		1,165			
Other Agencies	Federal					173	153			85	130	69	83	277	368	121	130			725	864	0	725	864
Section Pringers 0	Water Users																			0	0			
Facing Series	Other Agencies											25	25	200	276					225	301			
Facing Series																								
Facing Series	Deschutes Project	0	0	0	0	48	75	0	0	131		216	198	109		146	171	0	0	650	731			
Wate Disc																						0	575	681
Intersect Control Cont																								
Signer Proper Proper Signer Signer Proper Si												75	50							75	50			
February 1.5 1																								
Trebard	Eastern Oregon Projects	0	0	0	0	170	170	0	0	248	292	166	114	70	387	107	401	0	0	761	1,364			
Water View																						0	722	1,339
Other Agenties																								,
The proper is a series of the proper is a se												30	15											
Februal Water Users																				1				
Februal Water Users	Hungry Horse Project	0	0	25.625	14.932	318	349	0	0	58	63	0	0	58	63	0	0	0	0	26.059	15,408			
Water Users		, and the same of						ŭ				, i	Ů			, i		, and the second				0	434	476
Other Agendate \$\begin{array}{c c c c c c c c c c c c c c c c c c c						525	5.7			20	93				93					1	0	Ů		-70
within Greham's Project 0 0 0 17 25 0 0 1,39 1,572 33 1,59 0 0 37 34 0 0 1,455 1,556 1,440				25 625	14 932									-							14 932			
Federal Protects 17 20 1,136 1,147 32 55 37 34 1,16 1,46 0 1,140 1,40				20,020	11,702															20,020	1.,,,,,,,,,			
Federal Protects 17 20 1,136 1,147 32 55 37 34 1,16 1,46 0 1,140 1,40	Lewiston Orchards Project	n	Λ	Λ	Λ	17	20	n	ρ	1 340	1.372	32	130	0	n	37	34	Λ	0	1 435	1.556			
Water Users 1. 1. 1. 1. 1. 1. 1. 1.		0	0		U			,	J					,	J			0				n	1 410	1 406
Other Agencies 1						1	20					32	,3			37	J-4						1,410	1,770
finishis Area Projecte										43	43		35	-										
Februal 11 30	Other Agencies												33								33			
Februal 11 30	Minidoko Aroo Projecto	2 003	5 760	11 205	10.782	2.464	1 020	0	0	1.015	852	600	442	1.475	604	1 228	1 270	0	0	20 160	21 720			
Water Grace 2,082 5,790				11,295	10,762			U	U									U	U			0	6 602	£ 100
Other Agencies 11.395 19.782						2,404	1,920			1,015	052	550	442	1,4/5	094	1,176	1,250					U	0,092	5,100
Comparison Com		2,002	5,730	11 205	10.703							50				50	20							
Federal	Other Agencies			11,295	10,/82							50				50	20			11,395	10,802			
Federal	D Diana Talana Dialahan			1 220	1 420	451	455			1 272	1.255	200	255	550	1.540	100	107			4.004	5.000			
Water Uses		0	0	1,230	1,420			0	0									0	U				2 200	2.054
Other Agencies										1,5/2	1,357	199	182	362	858	190	187					U	2,389	2,850
Federal 2.34 269 0 0 23 23 36 35 71 112 48 32 89 354 96 102 0 0 598 926						185	185																	
Federal 34 69 22 22 23 86 38 71 112 43 32 89 214 96 102 393 886 0 393 886 Water Uers 20 20 00 5 5 0 5 10 5 0 5 0 5 0 5 0 5 0 5 0	Other Agencies			1,230	1,420							90	75	190	690					1,510	2,185			
Federal 34 69 22 22 23 86 38 71 112 43 32 89 214 96 102 393 886 0 393 886 Water Uers 20 20 00 5 5 0 5 10 5 0 5 0 5 0 5 0 5 0 5 0	Total dia Book of		4.00	_	_	2.0	**	20				40	25		257	0.0	100		_	=00	000			
Water Users Other Agencies 200 200				0	0													0	0			_	265	
Other Agencies						23	23	36	35	71	112	43	32	89		96	102					0	393	586
Institit Froject 5.68 5.81 0 0 204 6.26 0 0 1,196 1,049 8.79 7.47 94 8.2 3.28 3.18 0 0 3,269 3,403 Federal 445 458 204 6.26 1,196 1,196 1,049 8.54 7.72 94 8.2 3.28 3.18 0 0 3,265 0 3,121 3,265 Other Agencies 123		200	200											1	140						340			
Federal Water Users 123 123 123 123 123 123 123 123 123 123	Other Agencies											5		—						5	0			
Federal Water Users 123 123 123 123 123 123 123 123 123 123	L																							
Water Users				0	0			0	0									0	0					
Other Agencies Vashington Area Projects 0 0 0 0 138 57 0 0 16 10 95 171 21 27 222 260 0 0 492 525 525						204	626			1,196	1,049	854	732	94	82	328	318					0	3,121	3,265
Vashington Area Projects 0 0 0 0 0 138 57 0 0 0 16 10 95 171 21 27 222 260 0 0 0 492 525 Federal 138 57 0 16 10 70 111 21 27 222 260 0 0 0 467 465 0 467 465 O 467 465		123	123																					
Federal Book of the Federal Fe	Other Agencies											25	15							25	15			
Federal Book of the Federal Fe																								
Water Users Other Agencies Control Obligations 21,692 23,058 282,276 220,276 9.715 10,075 168 154 11,088 12,115 11,088 12,115 11,089 12,014 12,014 13,018 15,017 15,014 15,017 1	Washington Area Projects	0	0	0	0			0	0									0	0					
Other Agencies Continue of the Continue of Agencies Continue of						138	57			16	10	70	111	21	27	222	260				465	0	467	465
Askima Project 2,337 926 3,812 7,387 1,624 1,762 0 0 0 4,468 4,842 232 208 71 129 362 654 0 0 12,906 15,908 Federal 1,065 147 8819 1,472 14,553 4,727 157 183 71 129 362 654 0 6,827 7,312 0 6,827 7,312 Water Users 1,272 779																					0			
Federal 1,065 147 819 1,472 4,353 4,727 157 183 71 129 362 654 6827 7,312 0 6,827 7,312 Water Users 1,272 779 3,812 7,387 805 290 115 115 115 75 25 1 4,807 7,817 120 14,807 7,817 120 14,807 1,	Other Agencies											25	60							25	60			
Federal 1,065 147 819 1,472 4,353 4,727 157 183 71 129 362 654 6827 7,312 0 6,827 7,312 Water Users 1,272 779 3,812 7,387 805 290 115 115 115 75 25 1 4,807 7,817 120 14,807 7,817 120 14,807 1,																								
Federal 1,065 147 819 1,472 4,353 4,727 157 183 71 129 362 654 6827 7,312 0 6,827 7,312 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Yakima Project	2,337		3,812	7,387			0	0								654	0	0	12,906	15,908			
Water Users 1,272 779		1,065				819	1,472			4,353	4,727	157	183	71	129	362	654				7,312	0	6,827	7,312
Other Agencies 21,692 23,058 282,276 220,276 9,715 10,075 168 154 12,008 12,215 7,231 3,638 5,523 5,848 8,332 8,336 0 0 346,946 283,601 Total Pederal 6,635 2,885 4,317 9,464 8,725 9,600 168 154 11,839 12,042 6,731 3,288 4,833 4,492 7,900 8,316 0 0 51,149 50,242 0 51,149 50,242 Total Water Users 15,057 20,173 0 0 185 185 0 0 132 135 500 325 690 1,166 432 20 0 0 280,518 212,748 4 of Appropriated Funds 13.0% 5.7% 8.4% 18.8% 17.1% 19.1% 0.3% 0.3% 23.1% 24.0% 13.2% 6.5% 9.4% 8.9% 15.4% 16.6% 0.0% 0.0% 100.0% 100.0%							ŕ			,	, in the second													,
Cotal Obligations 21,692 23,088 28,276 220,276 9,715 10,075 168 154 12,008 12,215 7,231 3,638 5,523 5,848 8,332 8,336 0 0 346,946 283,601 Total Federal 6,635 2,885 4,317 9,464 8,725 9,600 168 154 11,839 12,042 6,731 3,288 4,833 4,492 7,900 8,316 0 0 51,149 50,242 0 51,149 50,242 Total Water Users 15,057 20,173 0 0 185 185 0 0 37 38 0 25 0 190 0 0 0 15,279 20,611 Total Other Agencies 0 0 277,959 210,812 805 290 0 0 132 135 500 325 690 1,166 432 20 0 0 0 280,518 212,748 (4 of Appropriated Funds 13.0% 5.7% 8.4% 18.8% 17.1% 19.1% 0.3% 0.3% 23.1% 24.0% 13.2% 6.5% 9.4% 8.9% 15.4% 16.6% 0.0% 0.0% 100.0% 100.0%				3,812	7,387	805	290			115	115	75	25										1	
Total Federal 6,635 2,885 4,317 9,464 8,725 9,600 168 154 11,839 12,042 6,731 3,288 4,833 4,492 7,900 8,316 0 0 51,149 50,242 0 70 10 10 10 10 10 10 10 10 10 10 10 10 10				-,	.,		0													1 .,/	.,			
Total Federal 6,635 2,885 4,317 9,464 8,725 9,600 168 154 11,839 12,042 6,731 3,288 4,833 4,492 7,900 8,316 0 0 51,149 50,242 0 70 10 10 10 10 10 10 10 10 10 10 10 10 10	Total Obligations	21,692	23,058	282,276	220,276	9,715	10.075	168	154	12,008	12,215	7,231	3,638	5,523	5,848	8,332	8,336	0	0	346,946	283,601			
Total Water Users 15,057 20,173 0 0 185 185 0 0 37 38 0 25 0 190 0 0 0 15,279 20,611 Total Other Agencies 0 0 0 277,959 210,812 805 290 0 0 132 135 500 325 690 1,166 432 20 0 0 0 280,518 212,748 4 of Appropriated Funds 13.0% 5.7% 8.4% 18.8% 17.1% 19.1% 0.3% 0.3% 23.1% 24.0% 13.2% 6.5% 9.4% 8.9% 15.4% 16.6% 0.0% 0.0% 100.0% 100.0%																		0	0			0	51.149	50.242
Total Other Agencies 0 0 277,959 210,812 805 290 0 0 132 135 500 325 690 1,166 432 20 0 0 280,518 212,748 4 of Appropriated Funds 13.0% 5.7% 8.4% 18.8% 17.1% 19.1% 0.3% 0.3% 23.1% 24.0% 13.2% 6.5% 9.4% 8.9% 15.4% 16.6% 0.0% 0.0% 100.0% 100.0%				0	0				0								0	0	0			· ·		20,242
6 of Appropriated Funds 13.0% 5.7% 8.4% 18.8% 17.1% 19.1% 0.3% 0.3% 23.1% 24.0% 13.2% 6.5% 9.4% 8.9% 15.4% 16.6% 0.0% 0.0% 100.0%			0	277.959	210.812				0								20	0	0					
		v	0	2,555	210,012	000			Ů	132	200	200	020	0,0	2,230	.52	-0		·	200,010				
	% of Appropriated Funds	13.0%	5.7%	8.4%	18.8%	17.1%	19.1%	0.3%	0.3%	23.1%	24.0%	13.2%	6.5%	9.4%	8.9%	15.4%	16.6%	0.0%	0.0%	100.0%	100.0%			
/ Pediate OSM during Construction Sofety of Done of	·	13.0 /6	5.7 /0	0.7/0	10.0 /0	17.170	17.1 /0	0.576	0.5 /0	20.1 /0	27.0 /0	23.278	0.5 /0	7.478	0.7 /0	25.470	20.0 /0	0.0 /0	0.0 /8	230.0 /6	200.0 /0		1	
			i e	i e	ı	1				i e	ı					1			1					

								Operating 1	Expenses								Non-O	perating	To	otal			Projec	t Total
MP REGION		igation	Pov		Flood C		M	&I	F	&W	Water		Recreation		LR		Expe	nses 1/	Obliga	gations		C/O	Fed	eral
Projects Cachuma Project	FY 2019 931	FY 2020 811	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019 956		FY 2019	FY 2020	FY 2019	FY 2020	FY 2019 F	Y 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019 1,887	FY 2	020 1,644	FY 2019	FY 2019	FY 2020
Federal	931	811	0	0	0	0	956		0	0	0	0	0	0	0	0	0	0	1,887		1,644	319	1,568	1,644
Water Users	70.1	011					320	000							ŭ		,		1,007	0	0		1,000	1,011
CVP, American River Division	4,801	4,803	8,451	8,560	2,071	2,071	664		267		172	172	7	7	0	0	0	0	16,432		6,544			ļ!
Federal	4,801	4,803	2,430	2,430	2,071	2,071	664	664	267	267	172	172	7	7	0	0	0	0	10,411	1 1	0,414	196	10,215	10,414
Water Users			6,021	6,130															6,021	1 '	6,130			
CVP, Auburn-Folsom	1,280	1,270	346	343	85	84	140	139	368	366	6	6	11	11	0	0	0	0	2,236	6	2,219			
Federal	1,280	1,270	346	343	85	84	140	139	368	366	6	6	11	11	0	0	0	0	2,236		2,219	17	2,219	2,219
Water Users																			0	0	0			
CVID D II DI II	10.610	- 100	2.540	050		462	2.004	4.050	2 505	1061									20.050					
CVP, Delta Division Federal	18,610 18,610	7,109 7,109	2,540 2,540	970 970	1,211 1,211	463 463	2,801 2,801	1,070 1,070	2,785 2,785		113 113	43	0	0	0	0	0	Ü	28,059 28,059		0,719 0,719	5,355	22,704	10,719
Water Users	10,010	7,109	2,340	310	1,211	403	2,001	1,070	2,763	1,004	113	43	-		0	U	0	0	20,039	0	0,719	3,333	22,704	10,719
																					Ť			
CVP, East Side Division	2,052	2,034	2,578	2,574	294	291	163		794	788	0	0	317	314	0	0	0	0	6,198		6,162			
Federal	2,052	2,034	478	474	294	291	163	162	794	788	0	0	317	314	0	0	0	0	4,098		4,062	36	4,062	4,062
Water Users			2,100	2,100															2,100	0	2,100			
CVP, Friant Division	2,797	2,879	38	39	1,439	1,482	398	410	105	108	0	n	1	1	0	n	0	n	4,778	8	4,919			
Federal	2,797	2,879	38	39	1,439	1,482	398		105	200		0	1	1	0	0	0	0	4,778		4,919	61	4,717	4,919
Water Users																			0	0	0			
	42.455		0.51		2.05		1.000						477			_		-	40					<u> </u>
CVP, Misc. Proj. Programs Federal	13,188 13,188	5,457 5,457	851 851	352 352	2,961 2,961	1,225 1,225	1,833 1,833	758 758	675 675			4	156 156	65 65	0	0	0	0	19,672 19,672		8,140 8,140	1,051	18,621	8,140
Water Users	13,188	5,457	951	352	2,901	1,225	1,833	/58	0/5	2/9	9	4	150	05	U	0	l "	U	19,6/2	0	0,140	1,051	18,021	6,140
water esers																			ĺ		ı,			
CVP RAX Program	9,145	8,835	16,401	16,184	1,411	1,363	1,283	1,239	552	533	131	126	0	0	0	0	0	0	28,921	1 2	8,280			
Federal	9,145	8,835	6,401	6,184	1,411	1,363	1,283	1,239	552	533	131	126	0	0	0	0	0	0	18,921		8,280	94	18,827	18,280
Water Users			10,000	10,000															10,000	0 10	0,000			
CVP, Sacramento Rvr. Div.	11,326	1,716	737	112	342	52	1,061	161	824	125	28	4	0	0		0	0	0	14,319	0	2,170			
Federal	11,326	1,716	737	112	342	52	1,061	161	824			4	0	0	0	0	0	0	14,319		2,170	29	14,290	2,170
Water Users							7												0	0	0		,	
																			1					
CVP, San Felipe Division	236	235	0	0	0	0	54		1		0	0	1	1	0	0	0	0	293		291			
Federal Water Users	236	235	0	0	0	- 0	54	54	1	1	. 0	0	1	1	0	0	0	0	293	3	291	10	283	291
water Users																			ľ	U	ď			
CVP, San Luis Unit West SJD	8,276	4,819	377	220	261	152	4,040	2,353	186	108	21	12	4	2	0	0	0	0	13,165	5	7,666			
Federal	8,276	4,819	377	220	261	152	4,040	2,353	186	108	21	12	4	2	0	0	0	0	13,165	5	7,666	1,505	11,660	7,666
Water Users																			0	0	0			!
CVP, Shasta Division	7,757	4,398	13,446	11,957	2,035	1,154	1,054	598	284	161	171	97	4	2	0	0	0	0	24,752	2 1	8,367			
Federal	7,757	4,398	4,246	2,407	2,035	1,154	1,054		284	161		97	4	2	0	0	0		15,552		8,817	2,618	12,934	8,817
Water Users		,	9,200	9,550	, , , ,	,	,										0	0	9,200		9,550	/	,	
CVP, Trinity River Division	10,014	8,430	10,831	10,359	856	720	437		421		80	67	0	0	0	0	0	0	22,639		0,298			
Federal Water Users	10,014	8,430	5,356 5,475	4,509 5,850	856	720	437	368	421	354	80	67	0	U	U	0	0	0	17,164 5,475		4,448 5,850	96	17,068	14,448
water Users	U	U	3,4/3	3,030															5,4/5	3	3,030			
CVP, Wtr & Power Opertn.	11,795	6,901	13,490	11,500	1,366	799	989	579	2,891	1,691	71	42	488	286	0	0	0	0	31,091		1,798			
Federal	11,795	6,901	5,338	3,123	1,366	799	989		2,891			42	488	286	0	0	0	0	22,939	9 1	3,421	157	22,782	13,421
Water Users			8,152	8,377															8,152	2	8,377			
Klamath Project	11,950	8,718		0	0	Δ.	0	0	11,294	7,801	0	Λ.	0	Λ	1,593	1,100	Δ.	Δ.	24,837	7 1	7,619			
Federal	10,450	7,218	0	0	0	0	0	0	11,294	7,801	0	0	0	0	1,593	1,100	0	0	23,337		6,119	837	22,500	16,119
Water Users	1,500	1,500							11,2/4	,,301			Ü		2,070	2,200	ľ		1,500		1,500	007	22,000	10,117
Lahontan Basin Projects	14,281	5,113	1,325	474	0	0	0	0	10,783	4,035	0	0	122	44	0	0	0	0	26,511	1 !	9,666		4	
Federal Water Users	14,281	5,113	1,325	474	0	0	0	0	10,509 274	3,762 273		0	122	44	0	0	0	0	26,237 274	7	9,393 273	386	25,851	9,393
viater Users			0	0					2/4	2/3							l		2/4	1	2/3			
Orland Project	856	855	0	0	0	0	0	0	0	0	0	0	18	18	0	0	0	0	874	4	873			
Federal	856	855	0	0	0	0	0	0	0	0	0	0	18	18	0	0	0	0	874		873	1	873	873
Water Users																			0	0	0			
Galana Bardara	2.624	2 204			6.4		(10	556				^	415	250		•			3.535	_				
Solano Project Federal	2,624 2,624	2,384 2,384	0	0	84 84	76	612 612	220	0	0	0	0	417 417	379 379	0	0	0	0	3,737 3,737		3,395 3,395	41	3,696	3,395
Water Users	2,024	4,384	. "	U	04	/0	012	550	"	, U		U	41/	319	, , , , , , , , , , , , , , , , , , ,	U	l '	U	3,737	ó	0,393	41	3,090	3,375
																					`			
																								$\overline{}$

								Operating I	Expenses								Non-O	perating	To	tal		Projec	rt Total
MP REGION	Irri	gation	Por	wer	Flood (Control	Ma	ķΙ	Få	&W	Water	Control	Recre	ation	LR	M	Expe	nses 1/	Obliga	ations	C/O	Fed	leral
Projects	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2019	FY 2020
Ventura River Project	130	129	0	0	0	0	108	107	0	0	0	0	0	0	201	199	0	0	440	434			
Federal	130	129	0	0	0	0	108	107	0	0	0	0	0	0	201	199	0	0	440	434	4	436	434
Water Users																			0	0			
Total Obligations	132,050	76,896	71,410	63,644	14,414	9,932	16,593	10,049	32,230	17,681	802	574	1,546	1,129	1,794	1,299	0	0	270,840	181,204			
Total Federal	130,550	75,396	30,462	21,637	14,414	9,932	16,593	10,049	31,956	17,408	802	574	1,546	1,129	1,794	1,299	0	0	228,118	137,424	12,812	215,306	137,424
Total Water Users	1,500	1,500	40,948	42,007	0	0	0	0	274	273	0	0	0	0	0	0	0	0	42,722	43,780			
% of Appropriated Funds	61%	55%	14%	16%	7%	7%	8%	7%	15%	13%	0%	0%	1%	1%	1%	1%	0%	0%	106%	100%			
	-		-		-		-		•		-		-				•				-	-	
1/ Reflects O&M during Construction, Safet	ty of Dams, et	tc.																					

								ating	Expenses									erating	To				ct Total
LC REGION		ation	Pov			Control	M&I	_	F&			Control		eation		RM		ises 1/	Obliga	ations	C/O	Fed	deral
Projects	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019 FY 2	020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2019	FY 2020
Ak Chin Water Rts Stlmnt	16,200	15,311	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16,200	15,311			
Federal	16,200	15,311																	16,200	15,311	0	16,200	15,31
Water Users																			0	0			
CAP Distribut Sys O&M	6,734	6,228	0	0	0	0	0	0	0	0	0	0	0	0	386	386	0	0	7,120	6,614			
Federal	6,534	6,006											0		386	386			6,920	6,392	0	6,920	6,39
Water Users	200	222											0						200	222			
CRBSCP, Title I	0	0	0	0	0	0	0	0	0	0	15,453	14,739	0	0	0	0	0	0	15,453	14,739			
Federal					1						15,453	14,739							15,453	14,739	0	15,453	14,73
Water Users												, i							0	0			
Parker-Davis Project	0	0	17,331	17,032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17,331	17,032			+
Federal			0	0	1														0	0	0	0	j
Water Users			17,331	17,032															17,331	17,032			
Salt River Project	350	350	0	0	0	0	0	0	0	0	0	0	0	0	650	609	0	0	1,000	959			+
Federal	350	350													549	549			899	899	0	899	89
Water Users															101	60			101	60			
Yuma Area Projects	1,333	1,275	0	0	21,884	21,063	0	0	1,121	1.107	0	0	0	0	1,142	1.188	0	0	25,480	24,633			-
Federal Federal	1,183	1,125			21,315	20,494		Ť	1,121	1,107	0				1,142	1,188		0	24,761	23,914	0	24,761	23,91
Water Users	150	150			569	569			1,121	1,107					1,142	1,100			719	719	· ·	24,701	23,71
Water Osers	100	100			207	207													725	,,,			<u> </u>
Total Obligations	24,617	23,164	17,331	17,032	21,884	21,063	0	0	1,121	1,107	15,453	14,739	0	0	2,178	2,183	0	0	82,584	79,288			/
Total Federal	24,267	22,792	0	0	21,315	20,494	0	0	1,121	1,107	15,453	14,739	0	0	2,077	2,123	0	0	64,233	61,255	0	64,233	61,25
Total Water Users	350	372	17,331	17,032	569	569	0	0	0	0	0	0	0	0	101	60	0	0	18,351	18,033			
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	37.8%	37.2%	0.0%	0.0%	33.2%	33.5%	0.0%	0.0%	1.7%	1.8%	24.1%	24.1%	0.0%	0.0%	3.2%	3.5%	0.0%	0.0%	100.0%	100.0%			
Permanent O&M																							
Boulder Canyon Project	0	0	97,324	101,273	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97,324	101,273		0	0
Federal			97,324	101,273																	0		
Water Users																			0	0			
Permanent O&M																							+
Appropriations	0	0	97,324	101,273	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97,324	101,273	0	0	0
Total Federal/O&M	24,267	22,792	97,324	101,273	21,315	20,494	0	0	1,121	1,107	15,453	14,739	0	0	2,077	2,123	0	0	161,557	162,528	0	64,233	61,255
1/ Reflects O&M during Constructio	n, Safety of Dams,	etc.																					

								Operatin	g Expenses								Non-Or	perating	Tot	al		Project	Total
UC REGION	Irrig			wer		Control		&I	F8	¿W	Water C		Recrea		LR		Exper	nses 1/	Obliga	tions	C/O	Fede	
Projects	FY 2019	FY 2020	FY 2019		FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020		FY 2020		FY 2020		FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2019	FY 2020
Animas-La Plata Project	0	0	0	0	0	0	0	0	264	809	2,341	9,004	0	0	206	200	174	225	2,985	10,238			
Federal									264	809	2,341	9,004			206	200	174	225	2,985	10,238	188	2,797	10,238
Water Users															-				0	0			
Balmorhea Project	0	0	0	0	0	0	0	0	13	12	11	10	0	0	12	10	0	0	36	32			i
Federal		U	U	U		U	U		13	12	11	10		U	12	10			36	32	4	32	32
Water Users									10			- 10				10			0	0	•		
Bonneville Unit,CUP	0	0	0	0	1,880	2,200	0	0	0	100	445	386	39	63	372	512	236	209	2,972	3,470			
Federal					1,880	2,200				100	445	386	39	63	372	512	236	209	2,972	3,470	98	2,874	3,470
Water Users																			0	0			
Bostwick Park Project	0	0	0	0	0	0	0		0		237	165	0	0	61	20	0	0	298	185			
Federal	U	U	U	U		U	U	U	- 0	U	237	165	U	U	61	20	U	U	298	185	97	201	185
Water Users											231	103			01	20			0	0	71	201	103
Water Osers																			· ·	v			ı
Carlsbad Project	0	0	0	0	1,240	1,312	0	0	2,291	1,677	1,219	176	69	101	210	245	0	0	5,029	3,511			ī
Federal					1,240	1,312			2,291	1,677	1,158	115	69	101	210	245			4,968	3,450	117	4,851	3,450
Water Users											61	61							61	61			
																							<u> </u>
Collbran Project	0	0	979	862	0	0	0	0	0	0	1,741	1,208	0	0	90	95	0	0	2,810	2,165			
Federal	_		979	862			1		I		1,741	1,098			90	95			2,810	2,055	209	2,601	2,055
Water Users Non-Federal			1				1		1		0	110							0	0 110			
Non-regeral	_		1				1		1		0	110	-		1				U	110			<u> </u>
Dallas Creek Project	0	0	0	0	0	0	0	0	0	0	448	365	0	0	77	90	0	0	525	455			
Federal	v	•	v				v	•			448	365	0	0	77	90			525	455	66	459	455
Water Users											110					,,,			0	0		107	1
																			_				i
Dolores Project	0	0	0	0	0	0	0	0	0	0	1,450	1,344	0	0	122	70	0	0	1,572	1,414			1
Federal											1,185	1,129			122	70			1,307	1,199	224	1,083	1,199
Water Users																			0	0			
Other Agencies											265	215							265	215			
								_					_										
Eden Project	0	0	0	0	0	0	0	0	0	0	252 252	192 192	0	0	109 109	102 102	0	0	361	294 294	49	312	294
Federal Water Users											252	192			109	102			361 0	294	49	312	294
water users															<u> </u>				U	U			
Emery County Project	0	0	0	0	0	0	0	0	0	0	501	264	0	0	216	228	0	0	717	492			
Federal	- v		, , , , , , , , , , , , , , , , , , ,								501	264			216	228			717	492	80	637	492
Water Users																			0	0			<u> </u>
																							1
Florida Project	0	0	0	0	0	0	0	0	0	0	317	296	0	0	45	40	0	0	362	336			
Federal											317	296			45	40			362	336	85	277	336
Water Users																			0	0			
	_															=0							
Fruitgrowers Dam Project Federal	0	0	0	0	0	0	0	0	0	0	201 201	145 145	0	0	31 31	50 50	0	0	232 232	195 195	43	189	195
Water Users											201	143	U	U	31	30			0	195	43	189	195
act Catta							1		1										U	0			
Grand Valley, CRBSCP	0	0	0	0	0	0	0	0	0	0	4,149	2,614	0	0	207	187	0	0	4,356	2,801			 I
Federal											3,358	1,878			158	140			3,516	2,018	684	2,832	2,018
Water Users																			0	0			
Other Agencies											791	736		-	49	47			840	783			
																							
Hammond Project	0	0	0	0	0	0	0	0	0	0	186	197	0	0	16	20	0	0	202	217			
Federal	_						1		l		186	197			16	20			202	217	41	161	217
Water Users	_																		0	0			
Hyenm Project	0	^	0	Δ.	0	Α	0	Δ.	0		241	259	0	^	64	64	0	Α.	305	323			
Hyrum Project Federal	0	0	0	0		0	, v	U	- °	U	241	259	U	U	64	64	U	0	305 305	323	18	287	323
Water Users			1				1		1		271	20)			V-7	0-7			0	0	10	207	
																			Ü	•			
Jensen Unit, CUP	0	0	0	0	0	0	0	0	0	0	1,256	215	579	64	274	27	0	0	2,109	306			
Federal											256	215	579	64	274	27			1,109	306	48	1,061	306
Water Users																			0	0			
Non-Federal											1,000	0							1,000	0			
Lyman Project	0	0	0	0	0	0	0	0	0	0	331	274	0	0	20	15	0	0	351	289			
Federal									l		331	274			20	15			351	289	28	323	289
Water Users							<u> </u>												0	0			

									g Expenses									perating	To			Projec	
UC REGION	Irriga			wer	Flood	Control		&I		kW	Water			eation	LF			nses 1/	Obliga		C/O	Fed	
Projects	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2019	FY 2020						
Mancos Project	0	0	0	0	0	0	0	0	0	0	1,350	741	0	0	34	50	0	0	1,384	791			
Federal	U	U	U	U	U	U	· ·		U	U	1,337	728	U	U	34	50	· ·		1,371	778	23	1,348	778
Non-Federal											13	13							13	13		1,010	
Middle Rio Grande Project	0	0	0	0	0	0	0	0	15,487	11,311	14,657	16,921	0	0	314	1,100	0	0	30,458	29,332			
Federal									14,612	10,561	14,657	16,921			314	1,100			29,583	28,582	1,233	28,350	28,582
Water Users									875	750									875	750			
Moon Lake Project	0	0	0	0	0	0	0	0	0	0	128	110	0	0	14	12	0	0	142	122			
Federal	U	U	U	U	U	U	U	U	U	U	128	110	U	U	14	12	U	U	142	122	18	124	122
Water Users											120	110							0	0	10		
Navajo Unit, CRSP (SEC 5 & 8)	0	0	0	0	0	0	0	0	0		0	0	1,753	502	90	110	0	0	1,843	672			
Federal										60	0	0	1,521	270	90	110			1,611	440	101	1,510	440
Water Users																			0	0			
Non-Federal													232	232					232	232			
Other Agencies							1		1								1		0	0	1	1	
Newton Project	0	0	0	0	0	0	0	0	0	0	122	128	0	0	45	57	0	0	167	185	l	1	
Federal						•	l		l		122	128	3		45	57	l	,	167	185	13	154	185
Water Users																			0	0			
Ogden River Project	0	0	0	0	0	0	0	0	112	0	267	235	0	0	137	126	0	0	516	361			
Federal									112	0	267	235			137	126			516	361	6	510	361
Water Users																			0	0			
Paguia Pugiagt	0	0	0	0	0	0	0	0	0	0	262	265	6	-	72	75	0	0	340	346			
Paonia Project Federal	U	U	U	U	U	U	U	U	U	U	262	265	0	0	72	75	U	U	334	340	33	301	340
Water Users											202	200	6	6		75			6	6	33	301	340
Non-Federal																			0	0			
Other Agencies																			0	0			
Paradox Unit, CRBSCP	0	0	0	0	0	0	0	0	668	33	4,507	4,844	0	0	901	667	0	0	6,076	5,544			
Federal									504	25	3,474	3,522			684	500			4,662	4,047	349	4,313	4,047
Water Users									164	8	1,033	1,322			217	167			0 1,414	1,497			
Other Agencies									104	0	1,033	1,322			217	107			1,414	1,497			
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	0	0	0	0	0	0	0	0	644	315	0	0	84	100	0	0	728	415			
Federal											644	315	0	0	84	100			728	415	261	467	415
Water Users																			0	0			
Other Agencies																			U	U			
Preston Bench	0	n	0	0	0	0	0	0	0	0	49	59	0	0	4	2.	0	0	53	61		1	
Federal	-					•	l		l		49	59	3		4	2	l	, ,	53	61	6	47	61
Water Users																			0	0			
Provo River Project	0	0	330	900	0	0	0	0	1,899	1,438	564	465	40	47	330	388	0	0	3,163	3,238			
Federal			330	900					470	568	564	465	40	47	330	388			1,734	2,368	31	1,703	2,368
Water Users									1.430	870									1 420	870			
Other Agencies							1		1,429	870							1		1,429	8/0	1	1	
Rio Grande Project	0	n	1,890	2,040	0	0	0	0	817	580	5,154	10,366	155	315	514	1,013	0	0	8,530	14,314	l	1	
Federal	J	0	1,890	2,040		0	ľ	- ·	817		4,663	9,873	155	315	514	1,013	l "	J	8,039	13,821	69	7,970	13,821
Water Users			,	, , ,							491	493							491	493			.,.
		-																					
San Juan-Chama Project	0	0	0	0	0	0	2,000	2,500	30		569	537	19	17	64	35	0	0	2,682	3,130			
Federal									30	41	569	537	19	17	64	35			682	630	63	619	630
Water Users							2,000	2,500	l						.		l		2,000	2,500	.		
San Luis Valley, Closed Basin	0	Α.	0		0	0	0	0	112	104	2.890	2,838	0	0	13	o	0		3,015	2,950	l		
Federal	U	0	U	0	0	0	0	0	112	104	2,890	2,838	U	0	13	8	0	U	3,015	2,950	65	2,950	2,950
Water Users							l		112	104	2,070	2,030			13		l		3,013	2,530	93	2,730	2,730
																				v			
Sanpete Project	0	0	0	0	0	0	0	0	0	0	78	79	0	0	0	0	0	0	78	79			
											78	79							78	79	6	72	79
Federal																							

UC REGION					F1 1	Control	Mě		g Expenses F&	***	XX.	G 4 1				RM		perating	Tota Obligati		C/O	Projec	
Projects	FY 2019		FY 2019	wer EV 2020			FY 2019				Water			eation EV 2020	FY 2019		Exper	FY 2020		FY 2020	FY 2019	Fed- FY 2019	FY 2020
Frojects	F 1 2019	F 1 2020	F1 2019	F 1 2020	F1 2019	F 1 2020	F1 2019	F 1 2020	F 1 2019	F 1 2020	F1 2019	F 1 2020	F 1 2019	F 1 2020	F1 2019	F 1 2020	F1 2019	F 1 2020	F1 2019	F 1 2020	F1 2019	F1 2019	F1 2020
San Luis Valley, Conejos	0	0	0	0	0	0	0	0	0	0	39	20	3	,	13	7	0	0	55	29			
Federal	Ü				· ·	Ů	, i				39	20	3	2	13	7			55	29	5	50	29
Water Users																			0	0			
Scofield Project	0	0	0	0	0	0	0	0	0	0	135	144	36	51	154	212	41	34	366	441			
Federal									0	0	135	144	36	51	154	212	41	34	366	441	14	352	441
Water Users																			0	0			
G 11 1 7 7	0		0		0		0	0	0		05	86			17		0		101	0.0			
Seedskadee Unit Federal	U	0	U	0	U	U	0	U	U	U	85 85	86	0	U	16 16	0	U	U	101 101	86 86	-	95	86
Water Users	1						1				65	00			10				0	0		- 73	- 00
Water esers	1						l l												Ů	v			
Silt Project	0	0	0	0	0	0	0	0	0	0	438	395	455	180	64	70	0	0	957	645			
Federal											438	395	275	0	64	70			777	465	76	701	465
Water Users												_							0	0			
Non-Federal													180	180					180	180			
Other Agencies																			0	0			
G tar in t											202	207	1.00						-me				
Smith Fork Project Federal	0	0	0	0	0	0	0	0	0	0	392 392	307 307	143	143	43	65 65	0	0	578 435	515 372	50	385	372
Water Users	1						-				392	307			43	05			435	0	50	383	312
Non-Federal													143	143					143	143			
Other Agencies	1												143	143					0	0			
Other rigenees																			Ĭ	ŭ			
Strawberry Valley Project	0	0	0	0	0	0	0	0	0	0	266	344	0	0	542	584	0	0	808	928			
Federal											266	344			542	584			808	928	11	797	928
Water Users																			0	0			
Tucumcari	0	0	0	0	0	0	0	0	0	0	29	20	0	0	5	0	0	0	34	20			
Federal											29	20				0			34 0	20	3	31	20
Water Users	-																		U	0			
Uncompahgre Project	0	0	0	0	0	0	0	0	618	493	261	190	0	0	100	175	0	0	979	858			
Federal	Ů	•	v		V	0	Ů		618	493	261	190	v		100	175	•		979	858	38	941	858
Water Users	1																		0	0			
Vernal Unit, CUP	0	0	0	0	0	0	0	0	0	0	229	301	115	131	49	53	0	0	393	485			
Federal											229	301	115	131	49	53			393	485	17	376	485
Non-Federal															0	0			0	0			
W.L. D D	1			-						40.5		* 000						_					
Weber Basin Project Federal	0	0	0	0	0	0	0	0	0	100 100	1,637 1,637	1,903 1,903	59 59	75 75	361 361	450 450	0	0	2,057 2,057	2,528 2,528	16	2,041	2,528
Water Users	1									100	1,037	1,903	59	/5	361	450			2,057	2,528	16	2,041	2,528
Non-Federal	1		1		1												l		0	0			
Other Agencies	i i																		0	0			
-9																				Ů			
Weber River Project	0	0	0	0	0	0	0	0	0	100	245	178	1,322	3,022	29	32	0	0	1,596	3,332			
Federal										100	245	178	1,322	1,522	29	32			1,596	1,832	4	1,592	1,832
Non-Federal														1,500					0	1,500			
				1			I							1									
Total Obligations	0	0	3,199	3,802	3,120	3,512	2,000	2,500	22,311	16,858	50,323	58,905	4,793	4,719	6,124	7,366	451	468	92,321	98,130			
Total Federal	0	0	3,199	3,802	3,120	3,512	2 000	0	19,843	15,230	46,669	55,955	4,232	2,658	5,858	7,152	451	468	83,372	88,777	4,596	78,776	88,777
Total Water Users	0	0	0	0	0	0	2,000	2,500	875	750	552	554	6	2077	0	0	0	0	3,433	3,810			
Total Non-Federal Total Other Agencies	0	0	0	0	0	0	0 0	0	0 1,593	0 878	1,013 2,089	123 2,273	555 0	2,055	0 266	0 214	0	0	1,568 3,948	2,178 3,365			
Total Other Agencies	U	U	U	U	U	U	0	U	1,593	0/8	2,009	2,273	U	U	200	214	0	U	3,740	3,305			
% of Appropriated Funds	0.0%	0.0%	3.6%	4.3%	3.5%	4.0%	0.0%	0.0%	22.4%	17.2%	52.6%	63.0%	4.8%	3.0%	6.6%	8.1%	0.5%	0.5%	105.8%	100.0%			
	2.4.																						
1/ Reflects O&M during Construction,	Safety of Dar	ns, etc.	l	1		l								1							l		

								Operating	Expenses								Non-Op	erating	Tot	tal		Projec	t Total
GP REGION	Irrigatio			wer	Flood (Me		F8		Water (Recre		LR		Expen		Obliga		C/O	Fede	
Projects		Y 2020	FY 2019	FY 2020	FY 2019		FY 2019		FY 2019		FY 2019		FY 2019	FY 2020	FY 2019	FY 2020		FY 2020	FY 2019	FY 2020	FY 2019	FY 2019	FY 2020
Arbuckle Project	0	0	0	0	72	77	80 80	91 91	30	34	75 66	44 39	0	0	1	1	0	0	258 249	247 242	0	249	242
Federal Non-Federal					72	77	80	91	30	34	9	59			1	1			249	242		249	242
Non-rederal											,								,	3			
Canadian River	0	0	0	0	58	56	23	18	13	7	46	35	0	0	6	6	0	0	146	122	1		
Federal					58	56	23	18	13	7	46	35			6	6			146	122	1	145	122
Non-Federal																			0	0			
Colo-Big Thompson	132	106	11,325	10,942	127	287	0	0	33	33	3,987	2,963	373	204	588	580	0	0	16,565	15,115	47		
Federal	132	106	11,325	10,942	127	287			33	33	2,270	1,498	261	177	574	566			14,722	13,609	47	14,675	13,609
Non-Federal			0	0							1,717	1,465	112	27	14	14			1,843	1,506			
Fry-Ark Project	1,054	158	5,056	5,502	498	89	881	132	1,095	192	3,214	3,226	245	246	568	549	0	0	12,611	10,094	0		
Federal	1,054	158	5,056	5,502	498	89	881	132	1,095	192	3,214	3,226	170	171	568	549			12,536	10,019		12,536	10,019
Non-Federal	2,001	100	2,020	2,002	.50		501	102	2,070	1,2	5,21.	0,220	75	75	200				75	75		12,000	10,017
Huntley	0	8	0	0	0	0	0	8	0	14	7	24	0	18	48	23	0	0	55	95	2		
Federal	0	8					0	8		14	7	24	0	18	48	23			55	95	2	53	95
Non-Federal																			0	0			
V dutab Durat	103	1/0	4 480	5 00°	15				20		20	10	4.47	***	120	120			4.026	F - 4-	0.4		
Kendrick Project	103 103	169 169	4,472 4,472	5,083 5,083	17 17	32 32	0	0	32 32	0	30 10	10 10	146 88	112 112	130 130	139 139	0	0	4,930 4,852	5,545	31 31	4,821	5,545
Federal Non-Federal	103	169	4,472	5,083	17	32			32		20	10	58 58	112	130	139			4,852 78	5,545	31	4,821	5,545
ron-reuerai											20		38						/8	U			
Leadville Project	0	0	0	0	0	0	0	0	0	0	650	0	0	0	1,936	30,000	0	0	2,586	30,000	0		
Federal											650				1,936	30,000			2,586	30,000		2,586	30,000
Non-Federal															ĺ				0	0		Í	
Lower Yellowstone	0	0	0	0	0	0	0	0	716	699	0	0	0	0	30	23	0	0	746	722	0		
Federal									716	699					30	23			746	722		746	722
Non-Federal																			0	0			
Mid-Dakota Rural	0	0	0		0	0	0		15	15	0	0	0	0	0	0	0	0	15	15	0		
Federal	U	U	U		U	U	U	U	15	15	U	U	U	U	U	U	U	U	15	15		15	15
Non-Federal									13	13									0	0		13	13
11011-1 Cuci ai																			·	Ů			
McGee Creek	0	0	0	0	114	104	542	566	32	5	35	5	145	44	150	122	0	0	1,018	846	0		
Federal					114	104	542	566	32	5	26	5	95	44	150	122			959	846		959	846
Non-Federal											9		50						59	0			
Milk River	479	1,595	0	0	116	432	0	0	318	252	129	316	427	1,081	250	149	0	0	1,719	3,825	5		2 151
Federal	479	1,321			116	432			318	252	129	216 100	427	1,081	250	149			1,719	3,451	5	1,714	3,451
Non-Federal		274										100							0	374			
Mirage Flats	6	6	0	Λ	14	R	0	n	0	0	13	10	16	14	63	46	0	0	112	84	1		
Federal	6	6			14	8					13	10	16	14	63	46			112	84	1	111	84
Non-Federal																			0	0	_	_	
																		_					
Mni Wiconi	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	13,480	13,094	13,480	13,101	5		
Federal												7					13,480	13,094	13,480	13,101	5	13,475	13,101
Non-Federal	-																		0	0			
Manutain Daul-	0		0		111	107	192	178	25	31	34	25	50	=-	187	135	116	107	710	(2)	-		
Mountain Park Federal	0	U	0	0	111	107 107	192	178	25	26 26	25	27 22	53 53	56 56	187	135	116	107	718 709	636 631	2	707	631
Non-Federal	1				111	10/	192	1/8	43	20	9	5	- 33	30	10/	133	110	10/	709	5		/0/	031
	1																			J			
Norman Project	0	0	0	0	76	90	36	57	36	46	17	22	126	102	121	125	0	0	412	442	0		
Federal					76	90	36	57	36	46	17	22	96	97	121	125			382	437		382	437
Non-Federal													30	5					30	5			
North Platte Project	436	478	1,232	1,118	15	28	3	4	28	68	51	30	48	35	98	125	0	0	1,911	1,886	37		
Federal	104	146	1,232	1,118	15	28	3	4	28	68	51	30	35	22	98	125			1,566	1,541	37	1,529	1,541
Non-Federal	332	332											13	13					345	345			
Nuonna Divon		0	_		125	124	204	22.4	25	22	50	25	261	227	265	247		0	1.022	000	_		
Nueces River Federal	0	0	0	0	127 127	134 134	284 284	324 324	37 37	32 32	58 37	27 22	261 226	226 216	265 265	247 247	0	0	1,032 976	990 975	0	976	975
Non-Federal	1				14/	134	284	324	0	0	21	5	35	10	205	247			976 56	15		9/6	9/5
							-			U	41	3		10					50	13			1

								Operating	Expenses								Non-Ope	erating	Tota	al		Projec	et Total
GP REGION	Irriga		Pov			Control	M	&I	F&		Water (eation	LF		Expens	ses 1/	Obliga	tions	C/O	Fed	leral
Projects	FY 2019		FY 2019		FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020			FY 2019	FY 2020		FY 2020		FY 2020	FY 2019	FY 2019	FY 2020
Ainsworth Unit	18	14	0	0	10	7	0	0	6	3	45	34	84	57	85	65	0	0	248	180	1		
Federal	18	14			10	7			6	3	45	34	59	34	85	65		0	223	157	1	222	157
Non-Federal	_												25	23					25	23			
Almena Unit	14	12	0	0	235	209	4	3	9	7	15	13	254	217	47	43	0	0	578	504	3		
Federal	14	12		-	235	209	4	3	9	7	15	13	229	192	47	43			553	479	3	550	479
Non-Federal													25	25					25	25			
Angostura Unit	5	5	0	0	0	0	0	0	0	0	96	420	588	297	300	276	0	0	989	998	1		
Federal	5	5									96 0	420	488	297	300	276			889	998	1	888	998
Non-Federal	_										U	U	100						100	U			
Armel Unit	86	85	0	0	284	279	0	0	0	0	10	4	0	0	24	20	0	0	404	388	1		
Federal	86	85			284	279					10	4			24	20			404	388	1	403	388
Non-Federal																			0	0			
Belle Fourche Unit	423	353	0	0	0	0	0	0	0	0	136	86	394	390	694	528	0	0	1,647	1,357	1		
Federal	383	313									136	86	309	290	694	528			1,522	1,217	1	1,521	1,217
Non-Federal	40	40									0	0	85	100					125	140			
Bostwick Unit	337	341	0	Δ.	454	435	0	n	100	178	244	183	217	138	202	189	0	Λ	1,554	1,464	,		
Federal	81	85	U	U	454	435	U	U	100	178	194	133	99	78	202	189		U	1,130	1,098	2	1,128	1,098
Non-Federal	256	256			7.7	733			100	1/0	50	50	118	60	202	107			424	366		1,120	1,076
Boysen Unit	29	47	1,647	1,415	248	624	0	0	18	2	29	29	342	296	144	140	0	0	2,457	2,553	1		
Federal	11	29	1,647	1,415	248	624			18	2	29	29	180	171	144	140			2,277	2,410	1	2,276	2,410
Non-Federal	18	18											162	125					180	143			
	1		* 00.	2.404	_							0			400				2002				
Buffalo Bill Dam Mod. Federal	4	57 57	2,895 2,895	3,186 3,186	7	98 98	0	U	6	32 32	0	U	43 19	83 59	108 108	115 115	0	0	3,063 3,039	3,571 3,547	21 21	3,018	3,547
Non-Federal		31	2,093	3,100		90			0	32			24	24	100	113			3,039	24	21	3,010	3,347
11011-1 cuciai													24	27					24				
Canyon Ferry Unit	171	230	1,968	1,966	1,650	1,474	22	29	902	1,007	73	92	1,423	323	289	199	0	0	6,498	5,320	1		
Federal	171	228	1,968	1,966	1,650	1,474	22	29	902	1,007	73	88	1,423	323	289	199			6,498	5,314	1	6,497	5,314
Non-Federal		2										4							0	6			
Cedar Bluff Unit	145	126	0	0	273	259	4	3	4	3	10 10	10 10	66 41	14	73 73	95 95	0	0	575	510	1	540	510
Federal Non-Federal	145	126			273	259	4	3	4	3	10	10	25	14	73	95			550 25	510	1	549	510
Non-reuerar													23						23	U			
Dickinson Unit	0	0	0	0	57	68	0	0	197	295	0	0	189	0	23	216	0	0	466	579	2		
Federal					42	53			197	295			189		23	216			451	564	2	449	564
Non-Federal					15	15													15	15			
East Bench Unit	148	172	0	0	77	74	0	0	57	36	26	191	272	267	152	156	0	0	732	896	7	505	000
Federal Non-Federal	148	127 45			77	74			57	36	26	148 43	272	267	152	156			732	808 88	7	725	808
1 ton-1 cuci ai	1 1	43									1	43							U	00			1
Frenchman-Camb Unit	263	226	0	0	686	654	0	0	196	173	178	138	850	423	280	346	0	0	2,453	1,960	28		
Federal	263	226			686	654			196	173	153	113	645	415	280	346			2,223	1,927	28	2,195	1,927
Non-Federal		-									25	25	205	8				-	230	33			
Garrison Diversion Unit	0	0	0	0	448	1,447	6,739	6,610	813	708	4,674	3,163	329	79	20	271	36,623	7,666	49,646	19,944	54	10 =1-	1000
Federal Non-Federal	-				448	1,447	6,739	6,610	813	708	4,674	3,163	250 79	79	20	271	36,623	7,666	49,567 79	19,865 79	54	49,513	19,865
rion-reuerai	1				1								19	/9			U	0	/9	/9			1
Glen Elder Unit	45	47	0	0	838	883	8	8	23	24	2,212	19	103	169	147	180	0	0	3,376	1,330	3		
Federal	45	47			838	883	8	8	23	24	2,212	19	58	90	147	180	0	0	3,331	1,251	3	3,328	1,251
Non-Federal													45	79					45	79			
Heart Butte Unit	34	31	0	0	60	64	0	0	205	252	324	13	477	303	25	316	0	0	1,125	979	0		
Federal	34	31			60	64			205	252	324	13	405	303	25	316			1,053	979		1,053	979
Non-Federal	-										-		72						72	0			-
Helena Valley Unit	15	44	0	0	11	11	18	27	109	154	5	52	0	0	13	25	0	n	171	313	n		1
	15	21		U	11	11	18	27	109	154	5	52	0	0	13	25	· ·	0	171	290	- J	171	290
Federal							10	21	107	134		32	U		1.5				1/1				270
Federal Non-Federal	13	23																	0	23			

								Operating	Expenses								Non-Op	erating	Tot	tal		Projec	t Total
GP REGION	Irrig			wer		Control	M	&I	F8	èW	Water			eation	LF		Expen	ses 1/	Obliga		C/O	Fed	eral
Projects	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019		FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019		FY 2019	FY 2020		FY 2020	FY 2019	FY 2020	FY 2019	FY 2019	FY 2020
Kansas River Area Federal	6	5	0	0	55 55	53 53	0	0	0	0	0	0	42 42	42 42	0	0	0	0	103	100 100	1	102	100
Non-Federal	- 0	3			55	53							42	42					103 0	100		102	100
Non-rederal																			· ·	U			
Keyhole Unit	28	28	0	0	112	111	1	1	68	67	140	34	397	0	351	326	0	0	1,097	567	1		
Federal	28	28			112	111	1	1	68	67	140	34	199		351	326			899	567	1	898	567
Non-Federal													198						198	0			
Kirwin Unit	35	29	0	0	177	182	0	0	3	3	15	11	107	96	74	64	0	0	411	385	3		
Federal	35	29	, i	Ů	177	182		·	3	3	15	11	107	96	74	64			411	385	3	408	385
Non-Federal																			0	0			
			0				40		40.5	0.4	•	=20	2=4	40.5		***			4.000				
Lower Marias Unit Federal	54 54	87 53	U	U	726 726	686 686	18 18	17 17	105 105	84 84	28 28	738 738	376 376	406 406	332 332	288 288	0	0	1,639 1,639	2,306 2,272	20 20	1,619	2,272
Non-Federal	34	34			720	000	10	17	103	04	20	730	370	400	332	200		U	1,039	34	20	1,017	2,212
Missouri Basin Unit	0	0	28	30	0	40	0	0	0	0	89	40	0	0	0	0	1,182	1,030	1,299	1,140	135		
Federal Non Federal			28	30	0	40					89	40					1,182	1,030	1,299	1,140	135	1,164	1,140
Non-Federal	1		1		1								1						0	0	1		
Narrows Unit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	30	0	0	38	30	0		
Federal															38	30			38	30		38	30
Non-Federal			.																0	0			
North Loup Unit	31	60	0	0	6	-	0	n	8	0	54	52	61	73	61	81	0	0	221	279	1		
Federal	31	60	· ·	U	6	5	U	U	8	8	54	52	31	43	61	81	U	U	191	249	1	190	249
Non-Federal						-							30	30					30	30	_		
North Platte Area	16	118	5,135	4,182	60	743	0	0	38	25	48	47	171	202	161	293	0	0	5,629	5,610	0		o
Federal Non-Federal	12	106 12	5,135	4,182	60	743			38	25	48	47	171	202	161	293			5,617 12	5,598 12		5,617	5,598
Non-rederal	12	12																	12	12			
Oahe Unit	110	37	0	0	0	0	0	0	0	0	0	0	0	0	0	73	0	0	110	110	0		
Federal	110	37														73			110	110		110	110
Non-Federal	-																		0	0			
Owl Creek Unit	30	19	0	0	13	10	0	0	0	0	6	4	25	15	33	27	0	0	107	75	2		
Federal	30	19			13	10				_	6	4	25	15	33	27		-	107	75	2	105	75
Non-Federal																			0	0			
Danid Waller, Daniela		0			46	20	00	(1	12	7	52	101	0	0		0	0	0	210	100	,		
Rapid Valley - Pactola Federal	0	U	0	U	46 46	30 30	98 98	61 61	12 12	7	53 53	101 101	0	U	1	U	0	0	210 210	199 199	2	208	199
Non-Federal					40	30	70	01		,	33	101							0	0		200	1,,,
Riverton Unit	7	10	46	65	16	34	0	0	44	10	8	8	266	247	272	238	0	0	659	612	0	C#0	
Federal Non-Federal	7	10	46	65	16	34			44	10	8	8	266	247	272	238			659 0	612		659	612
Tron-I cuci ai																			U	U			
Shadehill Unit	0	0	0	0	505	273	0	0	21	14	3	3	379	1	329	211	0	0	1,237	502	0		
Federal					505	273			21	14	3	3	226	1	329	211			1,084	502		1,084	502
Non-Federal			1		1								153						153	0	1		
Webster Unit	13	12	0	0	283	260	0	0	4	3	12	8	149	141	52	44	0	0	513	468	1		
Federal	13	12	ľ		283	260	Ů		4	3	12	8	149	141	52	44			513	468	1	512	468
Non-Federal																			0	0			
V-U4-21 TI24			4.051	5 (12	1.01-	1 41 -			140	10=	1.00/	1 257			40	4.			6 21 4	0.000	246		
Yellowtail Unit Federal	0	0	4,956 4,956	5,613 5,613	1,016 1,016	1,416 1,416	57 57	65 65	140 140	187 187	1,996 1,996	1,275 1,275	0	0	49 49	44	0	0	8,214 8,214	8,600 8,600	218 218	7,996	8,600
Non-Federal			7,730	3,013	1,010	1,710	31	03	140	10/	1,770	1,2/3			77	77			0,214	0,000	210	1,590	3,000
Rapid Valley - Deerfield	14	10	0	0	18	27	14	10	15	11	29	26	14	10	1	0	0	0	105	94	0		
Federal New Fordered	14	10			18	27	14	10	15	11	3	3	14	10	1				79 26	71		79	71
Non-Federal	+ -										26	23							26	23			
San Angelo	49	48	0	0	203	194	48	46	44	44	56	29	64	68	195	171	0	0	659	600	9		
Federal	49	48			203	194	48	46	44	44	37	24	64	68	195	171			640	595	9	631	595
Non-Federal											19	5							19	5			
					<u> </u>								l										

								Operating	Expenses								Non-Op	erating	To	tal		Projec	t Total
GP REGION	Irrig	ation		wer	Flood (M		F&		Water (Recre		LR			nses 1/	Obliga	ations	C/O	Fed	eral
Projects	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2019	FY 2020
Shoshone	54	69	536	706	10	9	0	0	7	0	34	34	62	73	175	123	0	0	878	1,014	5		
Federal	16	31	536	706	10	9			7		34	34	62	73	175	123			840	976	5	835	976
Non-Federal	38	38																	38	38			
Sun River	64	100	0	0	107	144	0	0	22	21	29	86	64	100	35	54	0	0	321	505	1		
Federal	64	100			107	144			22	21	29	86	64	100	35	54			321	505	1	320	505
Non-Federal																			0	0			
WC Austin	167	115	0	0	130	145	0	0	16	17	83	27	17	19	225	224	0	0	638	547	0		
Federal	167	115			130	145			16	17	57	22	17	19	225	224			612	542		612	542
Non-Federal											26	5							26	5			
Washita	0	0	0	0	434	478	134	168	39	42	104	54	303	52	448	361	0	0	1,462	1,155	2		
Federal					434	478	134	168	39	42	77	44	203	52	448	361			1,335	1,145	2	1,333	1,145
Non-Federal											27	10	100						127	10			
Wichita-Chenev	0	0	0	0	210	101	35	19	59	28	105	45	170	74	186	126	0	0	765	393	0		
Federal					210	101	35	19	59	28	91	40	155	74	186	126			736	388		736	388
Non-Federal											14	5	15						29	5			
Total Obligations	4,625	5,057	39,296	39,808	10,810	12,971	9,241	8,445	5,700	4,868	19,315	13,815	10,138	6,813	10,085	38,228	51,401	21,897	160,611	151,902	659		
Total Federal	3,929	3,983	39,296	39,808	10,795	12,956	9,241	8,445	5,700	4,868	17,343	12,065	8,304	6,130	10,071	38,214	51,401	21,897	156,080	148,366	659	155,421	148,366
Total Non-Federal	696	1,074	0	0	15	15	0	0	0	0	1,972	1,750	1,834	683	14	14	0	0	4,531	3,536	0		
% of Appropriated Funds	2.5%	2.7%	26.5%	26.8%	7.3%	8.7%	6.2%	5.7%	3.8%	3.3%	11.7%	8.1%	5.6%	4.1%	6.8%	25.8%	34.6%	14.8%	100.4%	100.0%			
1/ Reflects O&M during Constr	uction, Safety	of Dams, etc	c.																				

PROJECT REPAYMENT FY 2020 (\$ In Thousands) Leavitt Ad Non-Non-Act Deferred **Project** M&I Valorem Other Federal Reimb Total **Irrigators** Power Deferred Animas-La Plata^{1/} 0 22,703 44,895 0 0 3,000 0 0 477,534 548,132 1,171,85 Central Arizona Project^{2/} 32,493 624,380 240,951 435,534 995,785 1.561.764 5,062,759 Central Valley Project^{3/} 597,246 3,644,069 1,083,092 0 0 912,246 0 56,875 1,460,398 7,753,926 Colorado River Basin Salinity 0 0 0 0 0 0 0 0 453,790 453,790 Control Project, Title I Division^{4/} Fort Peck Reservation/Dry Prairie 0 0 0 0 0 28,419 0 0 307,584 336,003 Rural Water system^{6/} Lewis & Clark RWS^{7/} 106,079 436,646 542,725 0 0 0 0 0 0 0 Mni Wiconi Project^{8/} 0 0 0 0 0 0 0 487,813 505,269 17,456 Pick-Sloan Missouri Basin Garrison Diversion Unit^{9/} 82,170 0 0 283,958 29,434 291,821 1,478,968 2,166,351 0 0 Garrison Diversion Unit, 0 0 0 0 0 0 0 0 0 0 Individual Contracts^{10/} North Central Montana Rural Water 0 0 0 0 0 46,103 0 0 342,586 388,689 Project11/ San Diego Area Water^{12/} 0 0 0 0 0 563,710 0 0 172,590 736,300 Southern Arizona Water Rights 0 0 0 0 0 3.382 0 0 0 3.382 Settlement Act^{13/} Navajo Gallup Water Supply 0 0 76,704 0 0 13,600 0 0 1,147,534 1,237,838 Project14/ Colorado-Big Thompson Project^{15/} 275 0 0 0 0 0 0 0 0 275 Boysen Unit, P-SMBP^{16/} 17.539 0 0 0 0 0 0 0 27,673 10.134 Glen Elder Unit, P-SMBP^{17/} 5,582 70,840 76,768 0 346 0 0 0 0 0

"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 (\$1,828,684,166): This total includes \$1,652,971,000 repayment obligation of the Central Arizona Water Conservation District, a projected \$8,521,166 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, the difference becomes non-reimbursable.

Other (\$240,951,000): 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, \$240,951,000 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 (\$996,274,057): 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 (\$1,542,905,000): Costs include Colorado River Division, \$900,277; Indian Distribution Division, \$914,269,221; recreation, \$129,236,586; flood control, \$124,526,133; 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 \$160,514,949 for construction of the Upper Gila Division which is non-reimbursable under provisions of Public Law 108-451. In addition, \$108,152,132 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 CAWCD 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 extends 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 U.S. 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 (\$912,246,265): Includes \$819,116,358 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. Includes \$90,997,561 from the State of California for costs of fish and wildlife activities and \$2,132,346 for recreation facilities.

Deferred Use (\$56,875,000): Includes \$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. Includes \$54,450,000 for 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 (\$1,460,398,372): Includes flood control, \$146,026,792; fish and wildlife, \$413,242,059; recreation, \$108,566,338; navigation, \$6,613,979; water quality improvement, \$5,607,545; cultural and historical, \$7,100,856; highway improvement, \$14,663,318; safety, security, law enforcement, \$25,487,530; Kesterson cleanup, \$6,800,000; interest during construction, \$31,112,020; American River Pumping Station, \$3,589,612; San Joaquin River Restoration Program, \$17,568,121; Safety of Dams, \$674,020,202.

- 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.
- 6/ Fort Peck Non-Federal Share (\$28,419,000): 24 percent is the non-Federal cost-share that is provided between State and local funds.
 - Fort Peck Non-reimbursable (\$307,584,000): 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).
- Lewis & Clark Non-Federal Share (\$106,079,000): 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).
- Mni Wiconi 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.
 - Mni Wiconi Non-reimbursable (\$487,813,000): All 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.
- Garrison Reimbursable (\$403,425,000): 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; and \$291,821,000 for unused principal supply works capacity, which is deferred indefinitely under the Dakota Water Resources Act of 2000.
 - **Garrison Non-Federal Share** (\$283,959,000): The non-Federal share costs are \$76,000,000 for Indian irrigation on Fort Berthold; \$136,257,000 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, assigned costs of Pick-Sloan Missouri Basin power and storage of \$26,140,000; reimbursable interest during construction of municipal, rural, and industrial water supply of \$25,822,000; highway improvements costs of \$4,942,000; and Jamestown assignments of \$39,000.

Project Repayment FY 2020

Garrison Non-reimbursable (\$1,478,986,000): The non-reimbursable share costs are \$16,137,000 for non-Indian irrigation; \$6,978,000 for Indian irrigation; \$505,765,000 for the State of North Dakota Municipal, Rural, and Industrial Grant Program; \$366,541,000 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 \$466,953,000 for de-authorized features and OM&R on unused, completed features (includes \$208,000 credit for land donation).

- Garrison Individual Contracts Currently there is one individual long-term (40 year) water service contract for irrigation from Jamestown Reservoir of approximately 285 acre/feet. Payments consist of \$2.00/acre and a use of facilities charge for a share of the annual OM&R cost for the reservoir. Negotiations for requested renewal contracts will determine repayment terms.
- Rocky Boys/North Central RWS Non-Federal Share (\$46,103,000): 20 percent is the non-Federal cost-share that is provided between the State and local funds on the Non-Core Systems. The State and local share on the Core system is 20 percent non-Tribal portion.
 - **Rocky Boys/North Central RWS Non-reimbursable** (\$332,446,000): 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).
- Non-Federal Share (\$563,710,000): Includes \$280,287,000 from the cities of San Diego and Poway, Sweetwater Authority, Otay Water District, County of San Diego, and/or Tia Juana Valley County Water District; \$58,157,000 from the cities of Escondido, Poway, and/or San Diego; \$98,611,000 from the City of San Diego and/or San Diego County Water Authority; and \$126,655,000 from the Padre Dam Municipal Water District and/or the Helix Water District.

Non-reimbursable: \$172,590,000 is provided by the Federal government as grants and cooperative agreements.

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.

"Total" column cost is not based upon October 2017 price level (FY2018).

Non-Federal Share: Includes \$50,000,000 cost share from the State of New Mexico.

Non-Reimbursable: Includes \$45,142,493 for cultural resources; \$7,113,055 for mitigation; \$927,571,077 allocated to Navajo Nation water rights settlement; \$141,357,909 allocated to the City of Gallup, NM above their 35% repayment maximum; and \$26,349,689 allocated to the Jicarilla Apache Nation above their 35% repayment maximum.

Project Repayment FY 2020

Reimbursable: Includes \$64,205,121 allocated to City of Gallup, NM at their 35% repayment maximum and \$12,498,970 allocated to the Jicarilla Apache Nation at their 35% repayment maximum.

- Colorado-Big Thompson Individual contracts set to expire by 2020 four individual water service contracts are for irrigation, municipal/domestic and industrial uses for approximately 27 acre/feet. Payments vary with use from \$6 -\$55/acre-foot and \$15/acre-foot stand-by charge. Negotiations for requested renewal contracts will determine repayment terms.
- Boysen Individual Contract set to expire in 2020– Currently there are two water service contracts for irrigation and supplemental municipal water for up to 216 acre-feet. Payment consists of \$10-\$32.50 per acre-foot and annual OM&R. Negotiations for requested renewal contracts will determine repayment terms.
- 17/ Currently Glen Elder Irrigation District is under an annual water service contract and has indicated an interest to negotiate a long-term water service or repayment contract for a supplemental irrigation water supply. Payment for the current water service contract consists of \$2.75/acre-feet for the first 2,000 acre-feet and up to 5,500 acre-feet and annual OM&R. Additional water can be requested, and should water be available, can be purchased at \$2.75/acre-feet up to 15,170 total acre-feet, as well as, proportionate OM&R. Negotiations for the renewal contract will determine repayment terms.

Construction Program

Energy and Water Development (in thousands of dollars)

Bureau/State/Project	Estimated Cost	Through 2019	2020 Request
Bureau of Reclamation ^{1/}			
Arizona			
Central Arizona Project			
Redfield Canyon fish barrier	2,830	543	2,200
Colorado River Basin Salinity Control Project			
242 Wellfield Expansion	24,196	19,138	1,93
Colorado River Front Work and Levee System			
River mile 166 bankline stabilization	561	9	
Yuma Mesa Conduit Extension	10,359	6,993	2,16
San Carlos Apache Tribe Water Settlement Act	138,726	3,118	1,550
Arizona/California			
Colorado River wash fan control structures	3,326	1,167	1:
Colorado River Front Work and Levee System			
Cibola Old River Channel	1,422	260	17
California			
Colorado River Front Work and Levee System			
River mile 33 design and reconstruction	2,055	316	14
New Mexico			
Navajo-Gallup Water Supply Project	1,135,086	631,418	67,40
Pojoaque Basin Regional Water System			
Aamodt litigation settlement	226,998	98,468	8,30
Washington			
Yakima River Basin Enhancement Project			
Cle Elum fish passage	107,025	26,425	5,200
Safety of Dams			
California	220 500	222.025	
Folsom Dam	338,500	323,927	6,00
Boca Dam	27,800	25,837	1,50
Nebraska			
Box Butte	10,500	9,035	1,20
Oklahoma			
Altus Dam	23,500	22,416	1,00
Utah			
Steinaker Dam	40,000	31,403	8,00
Wyoming			
Bull Lake	69,000	57,176	8,500

^{1/} Excludes major Extraordinary Maintenance (XM or RAX) activities, as those are considered major repairs to existing assets and not "new construction."

		Repayment of Irrigation Investment By									Aı	arges e	
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	78	929					2373			65.00	0	65.00
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					2/								
Pick-Sloan Missouri Basin Project Garrison 4/	6220.00								2.00		32.01	N/A	55.22
Colorado-Big Thompson Project 5/	27.00										N/A	N/A	N/A
Glen Elder Unit, P-SMBP	5500.00										2.75		2.75
Southern Arizona Water Rights Settlement Act Prj	3800							3800			N/A	N/A	N/A

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
Total irrigation investment per acre	\$1,177	\$1,177,472,761	<u>A</u> /
Less repayment of irrigation investment per acre by:			
Water Rates ^(a)	-353	-353,355,556	<u>A</u> /
Repayment Contracts ^(a)	-233	-232,776,985	<u>A</u> /
Capital Relief	<u>-60</u>	<u>-59,669,919</u>	<u>A</u> / <u>A</u> /
Unpaid Capital per Acre	\$531	\$531,670,301	
Payment capacity per acre-foot	\$10.56 to \$318.34		<u>B</u> /
Average Annual rates per acre-foot:			
Construction ^{A/(a)}	\$30.14		<u>C</u> /
DMC Intertie	\$1.02		<u>C</u> /
Operation and maintenance	\$28.88		<u>C</u> /
Project Use Energy O&M	\$12.57		C/ C/ C/ C/ C/
Deficit	\$4.87		<u>C</u> /

- 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 final 2019 Water Rates for the period through September 2017. 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.
- B/Based on the final 2019 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 final 2019 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 2019 and is approximately \$133,901,969 (includes San Felipe Unit). Estimate to repay toward irrigation water use in 2019 is \$1.1 Million.

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	\$ 70,156,000
Non-Reimbursable	8,964,000
CRDF & Contributions	56,500,000
Indian Irrigation Deferral	5,670,000
UCRBF Revenue A/	781,550,000
Total	\$ 922,840,000

- 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.
- 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.
- 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.
- CBT: Individual contracts set to expire by 2020 Four individual water service contracts for irrigation, municipal/domestic and industrial uses for approximately 27 acre/feet. Payments vary with use from \$6 -\$55/acre-foot and \$15/acre-foot stand-by charge. Negotiations for requested renewal contracts will determine repayment terms.
- 6/ Currently Glen Elder Irrigation District is under an annual water service contract and has indicated an interest to negotiate a long-term water service or repayment contract for a supplemental irrigation water supply. Payment for the current water service contract consists of \$2.75/acre-feet for the first 2,000 acre-feet and up to 5,500 acre-feet and annual OM&R. Additional water can be requested and should water be available to be purchased at \$2.75/acre-feet up to 15,170 total acre-feet, as well as, proportionate OM&R. Negotiations for the renewal contract will determine repayment terms.

STATUS OF NEPA COMPLIANCE

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 EA was completed for rehabilitation of the Phase 2 portion of the SCIP system in August 2017. Mitigation monitoring and cultural resources monitoring are expected to occur over the next six to eight years of construction. An EA for Casa Blanca lateral canal lining has been initiated with expected completion in 2019. An EA was completed for the 4-mile post lift station on the Gila River Indian Reservation. A Notice of Intent to prepare an environmental impact statement (EIS) for the New Mexico Unit (NM Unit) of the Central Arizona Project (CAP) was published in the <i>Federal Register</i> on June 12, 2018. Issuance of a draft EIS is targeted for April 2019, with a final EIS and Record of Decision target of December 2019.
Boise Area Projects	Explore increased storage opportunities at Anderson Ranch, Arrowrock, and / or Lucky Peak Dams. A Notice of Intent (NOI) for this project is expected in 2019, a ROD will be forthcoming in 2020.
	Proposed Lease of Power-Privilege (LOPP) Project. A Notice of Intent (NOI) for this project is expected to in 2019 or 2020, a ROD will likely be forthcoming in 2020 or 2021.
Cachuma Project	Resource Management Plan Final EIS was completed and a ROD was signed May 27, 2011. Site specific NEPA will be required for projects proposed in the RMP.
	A draft Water Order amending Reclamation's water rights for the Cachuma Project was released by the State Water Resources Control Board on September 7, 2016. Comments on the draft order have been provided. A Final Order is pending.
	Reconsultation with NMFS on the Operation and Maintenance of the Cachuma Project was requested on May 27, 2014. A draft Biological Opinion was received on November 29, 2016 (2016 Draft BiOp). A revised new proposed action for Operation and Maintenance of the Cachuma Project was provided to NMFS on October 4, 2018. A draft biological assessment analyzing the revised new proposed action will be submitted to NMFS in mid-March 2019. An EIS will likely be needed to address the potentially significant impacts of implementing the biological opinion as well as the State Board's water order.
	A Draft EA for the City of Santa Barbara's proposed Warren Act Contract(s) (Pass Through Agreement) was released on January 12, 2016. The project was unable to be completed as it was included as an interrelated/interdependent action in the 2016 Draft BiOp provided by NMFS for the Cachuma Project. This project will be addressed in the EIS prepared for the new BiOp.Santa Barbara County Water Agency's long-term contract expires in 2020. Reclamation will need to complete additional NEPA for renewal of the contract.

Project	Status
· ·	The Cachuma Operation and Maintenance Board's long-term Operation and Maintenance contract expires in 2020. Reclamation will need to complete additional NEPA for renewal of the contract.
	The long-term Warren Act Contract for Central Coast Water Agency's non-Project water expires in 2020. Reclamation will need to complete additional NEPA for execution of a new Warren Act Contract.
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 EAs for ESA-mandated fish barrier projects which are being constructed as part of the CAP (Redfield Canyon EA completed in 2011, Verde EA/EIS expected to start in 2021). 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. The EA on the San Xavier Farm Extension project is underway with completion expected in 2019. A final EA was issued for the Casa Blanca segment of the Pima-Maricopa Project on the Gila River Indian Community in May 2013. An EA for Navajo Generating Station extension lease was completed in 2017. EAs were completed in 2018 for Pima and Pinal CAP recreation trails. Issuance of a final EA and Finding of No Significant Impact for the reallocation of non-Indian agricultural priority CAP water is anticipated in FY2019.
Central Valley Projects (CVP): American River Division Auburn-Folsom South Unit	A project wide Final Environmental Statement (EIS) was filed with 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 EPA September 23, 1980. Foresthill Divide area FES was filed with the CEQ May 25, 1976. Reclamation and the Sacramento Metropolitan Water Authority wrote a draft EIS/Draft Environmental Impact Report (EIR) and 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. Placer County Water Agency American River Pump Station Project Final EIS/EIR was released June 14, 2002. Folsom South Canal International Drive Extension Kilgore to Sunrise Project Initial Study/EA FONSI 08/29/08; CCAO Building
	Replacement Project, Folsom Complex FONSI 02/06/09; North Fork Pipeline Raw Water Bypass Pipeline Project FONSI 07/30/09.
	The following have been completed: American River Hatchery – New Hatchery Building EA/FONSI 10/01/2012; Nimbus Hatchery Fish Passage Project EIS/EIR/ROD 04/05/2013; Lake Natoma Waterfront Trail Project EA/FONSI 12/22/2014; 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; Green Valley Road Widening Project City of Folsom EA/FONSI 10/18/2016; Auburn Recreation District Maidu Bike Park Project EA/FONSI 7/2/2018; Dike 1 Trail Improvements EA/FONSI 7/6/2018.

Project	Status
	The following are in progress: Auburn Resource Management Plan-General Plan (RMP-GP) EIS/EIR, Draft EIS/EIR scheduled for release in Spring 2019; Cool Cave Quarry Lease Renewal EA;
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. An updated NEPA document is currently under development but could be affected by WIIN Act Section 4011 Contract Conversions.
American River Division Interim Water Service Contracts	The following have been completed: 2011-2013 Interim American River Division Water Service Contract Renewals for Placer County Water Agency and the City of Roseville (12/30/2010); 2013-2015 Sacramento County Interim Renewal Water Service Contract (12/28/2012); 2013-2015 Sacramento Municipal Utility District Interim Renewal Water Service Contract (12/28/2012); 2013-2015 City of Roseville Interim Renewal Water Service Contract (3/4/2013); 2015-2017 American River Division Interim Water Service Contract Renewal for the City of Roseville EA/FONSI 12/17/2014; 2015-2017 American River Division Interim Water Service Contract Renewal for the Sacramento Municipal Utility District EA/FONSI 12/17/2014; 2015-2017 American River Division Interim Water Service Contract Renewal for the Sacramento County Water Agency EA/FONSI 12/17/2014; 2016-2018 American River Division Interim Water Service Contract Renewal for the Placer County Water Agency EA/FONSI 02/25/2016. 2017-2019 American River Division Interim Water Service Contract Renewal for the City of Roseville EA/FONSI 2/28/2017; 2017-2019 American River Division Interim Water Service Contract Renewal for the Sacramento Municipal Utility District EA/FONSI 2/28/2017; 2017-2019 American River Division Interim Water Service Contract Renewal for the Sacramento Municipal Utility District EA/FONSI 2/28/2017; 2017-2019 American River Division Interim Water Service Contract Renewal for the Placer County Water Agency EA/FONSI 02/25/2018; 2018 American River Division Interim Water Service Contract Renewal For the Placer County Water Agency EA/FONSI 02/25/2018; 2018 American River Division Interim Water Service Contract Renewal EAs for the City of Roseville, Sacramento Municipal Utility District, Sacramento County Water Agency EA/FONSI 12/3/2018.
American River Division Warren Act Contracts	None are currently in progress. The following have been completed: Long-term Warren Act Contract for City of Roseville EA/IS (9/7/2006); 5-Year Warren Act Contract for Sacramento Suburban Water District EA/FONSI (3/31/2011); Warren Act Contract Between the United States and Sacramento Municipal Utility District EA/FONSI (12/28/2012); Temporary Warren Act Contract Between the United States and Placer County Water Agency EA/FONSI (04/02/13); Temporary Warren Act contract with East Bay Municipal Utility District EA/FONSI (3/28/2014); Temporary Warren Act contract with El Dorado Irrigation District EA/FONSI (December 2014); 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 4/2015); and Sacramento Municipal Utility District Five-Year

Project	Status
Troject	Temporary Warren Act Contract EA/FONSI 3/1/2015; Temporary Warren Act contract with East Bay Municipal Utility District EA/FONSI (7/24/2015); El Dorado Irrigation District Long-Term Warren Act Contract EA/FONSI (August 2016). Long-term Warren Act contract with Sacramento Suburban Water District (EA/FONSI 10/11/2018).
American River Division Grants	The following have been completed: El Dorado Irrigation District EA/FONSI 6/18/10; Mormon Island Final EIS/ ROD 6/18/10; Nevada Irrigation District Mt. Vernon Siphon Final EA/FONSI 9/1/10; East Bay Municipal Utility District WaterSMART Grant – Water and Energy Efficiency Lawn Conversion Rebate Program EA/FONSI (2/1/2012); WaterSMART Grant for North San Joaquin Water Conservation District Tracy Lake Groundwater Recharge Project EA/FONSI 6/9/2014; Sacramento Suburban Water District 2014 - Water Use Efficiency Grants EA/FONSI 1/6/2015; City of Sacramento Water Meter Retrofits and Expansion of the River Friendly Landscaping Program EA/FONSI 11/24/2015, Nevada ID WaterSMART Hydroelectric Project EA/FONSI 10/25/2017; Solano ID NRCS Grant Sweeney/McCune Creek Outflow Recover & Automation Project EA/FONSI 2/19/2016; City of American Canyon WaterSMART Advanced Metering Infrastructure Project EA/FONSI 5/17/17; EBMUD WaterSMART Water and Energy Conservation through Advanced Metering Infrastructure EA/FONSI 06/16/17
	The following are in progress: El Dorado Irrigation District WaterSMART Water Energy and Efficiency Grant Main Ditch Piping Project and North San Joaquin Water Conservation District Ag Water Use Efficiency South System Conveyance Improvement Project. R16AP00125 El Dorado Irrigation District WaterSMART Water Energy and Efficiency Grant, Main Ditch Piping Project; R17AP00315 EBMUD Water SMART Water Marketing Strategy, Bay Area Regional Water Market Program; R17AP00316 EDCWA WaterSMART Water Marketing Strategy; American River Basin Water Marketing Strategy Project;
	2018 Sacramento Suburban Water District CALFED Residential Meter Installation; 2018 San Juan Water District WaterSMART Drought Resiliency North American Basin Regional Drought Resiliency Project; 2018 North San Joaquin Water Conservation District WaterSMART Small-Scale Water Efficiency, South System Branch
	Automation Project 2018 North San Joaquin Water Conservation District WaterSMART Small-Scale Water Efficiency, South System Master Control Project 2019 Sonoma Resource Conservation District WaterSMART Cooperative Watershed Management Program Phase 1 Petaluma River Water Consortium;
	2019 Placer County Water Agency WaterSMART Small-Scale Water Efficiency Project Grant, Installation of Automated Canal Headgates to Increase Operational Efficiency; 2019 North San Joaquin Water Conservation District WaterSMART Water Energy and Efficiency Grant, South Pump Station Automation Project

Project	Status
Folsom Safety of Dams	The following have been completed: Safety of Dams Modifications to Dike 1 EA/FONSI 12/24/14; Folsom Area Improvements/Re-working EA/FONSI to be completed in 2017 (various clean-up projects at Dikes 1, 4, 5, 6, the right wing dam, Natoma pipeline and the JFP); Folsom Dam Safety and Flood Damage Reduction Project – Right Bank Stabilization Project EA/FONSI 2/11/15; Folsom Dam Road Access Restriction EIS/ROD 5/31/05; Joint Federal Project/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 04/14/09; Mormon Island Auxiliary Dam Modification, Folsom Dam Safety of Dams EIS/EIR/ROD 06/25/2010; Folsom Dam Safety and Flood Damage Reduction Joint Federal Project EIS/EIR/ROD 05/01/2007.
CVP-East Side Division New Melones	The following have been completed: New Melones Resource Management Plan/EIS/ ROD 6/3/10; Stanislaus Afterbay Dam Removal EA/FONSI (2/9/2012); Release of Oakdale I.D. and South San Joaquin I.D. Water from New Melones Reservoir EA/FONSI 04/08/13; New Melones Lake Concession Development EA/FONSI 08/28/13; Camp Nine Whitewater Events EA/FONSI 11/30/2016
	The following are in progress: New Melones Lake Concession Development EA/FONSI, New Melones Lake Old Parrott's Ferry Roadway Re-Opening EA; New Melones Tuttletown Disc Golf Course Installation EA
CVP, Delta Division Mendota Pool Group Exchange Program	The Mendota Pool Group 10-year exchange program expired February 2015. A Draft EIS/EIR analyzing the proposed issuance of annual exchange agreements over a 20-year period was released for public review on November 30, 2018. A Record of Decision is anticipated to be completed in August 2019.
Contra Loma Recreation Area Resource Management Plan	Resource Management Plan Final EIS was completed and a ROD was signed April 22, 2015. Site specific NEPA will be required for projects proposed in the RMP.
Delta Long-Term Renewal Contracts	Final EA/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 (IRCs) every two years since. NEPA will be needed for the following long-term contract renewals: City of Tracy California Dept. of Parks and Recreation, Mercy Springs Water District Assignments to Westlands Water District, Santa Clara Valley Water District, and Pajaro Valley Water District.
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 National Marine Fisheries Service for the CVP/SWP Coordinated Operations. The contracts have required NEPA compliance for IRCs every two years since. NEPA compliance for the long-term contract renewals will need to be completed.

Project	Status
Friant Division	Millerton Lake Resource Management Plan Final EIS was completed and a ROD was signed November 4, 2011. Site specific NEPA will be required for projects proposed in the RMP.
CVP, 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. The NEPA is completed on this project and the agreed to mitigation monitoring will be complete by 2022.
Sacramento River Water Reliability Study	This environmental document has been placed indefinitely on hold.
San Felipe Division	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 BO from the Service since then. This has resulted in smaller projects being generated to keep facilities in good working order. Reclamation prepares additional NEPA for these actions. As the 10-year program is over it is anticipated that NEPA will be needed for individual and/or long-term O&M for San Felipe facilities.
	An EA (09-010) was prepared for the San Justo Zebra Mussel Eradication Project and released for public review. Currently addressing the 2 comment letters received. Finalization of the EA is pending completion an eradication/management plan by Denver TSC. Additional NEPA will be needed for recreational facility maintenance in the area should the reservoir be re-opened to recreation.
	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 July 17, 2002. Region took over NOI published 8/29/08. Region circulated the document and SCCAO provided comments. The EIS is still being developed through the Regional Office.
CVP, West San Joaquin Division San Luis Unit - Drainage	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 the Barcellos Judgment, was filed with the EPA December 20, 1991. This plan was not accepted as complying 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 of 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

Project	Status
	identified in the ROD in the northerly area. Settlement Agreements have been reached with Westlands and the Northerly Districts. Reclamation is preparing a revised control schedule for the Court to specify project activities associated with implementation of drainage service for both Westlands and the Northerly Area. NEPA will be needed to address future drainage activities.
CVP, West San Joaquin Division, San Luis Unit Grasslands Bypass Project	Grassland Bypass Project Extension to 2019 EIS – ROD signed December 2009. The Grasslands Bypass Project expires December 2019. The Grasslands Drainers have approached Reclamation with a proposal to use the San Luis Drain for long-term storm flow management. NEPA will be needed to address any proposed use of the Drain.
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 National Marine Fisheries Service for the CVP/SWP Coordinated Operations and a Final EIS was never completed. The contracts have required NEPA compliance for IRCs every two years since. NEPA will be needed for the following long-term contract renewals: Westlands Water District, San Luis Water District, Panoche Water District, City of Avenal, City of Coalinga, City of Huron, California Dept. of Fish and Wildlife.
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	Resource Management Plan Final EIS was completed and a ROD was signed April 4, 2014. Site specific NEPA will be required for projects proposed in the RMP.
Long Term Plan to Protect Adult Salmon in the Lower Klamath River	The Record of Decision was signed in April 2017. Environmental commitments associated with this project are ongoing.
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/or the Final Programmatic EIR have been completed for subsequent Phase II projects. EA/IS documents were released for public comment on the Dutch Creek and Chapman Ranch Phase A Channel Rehabilitation Projects; the documents are expected to be finalized this year.
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

Project	Status
· ·	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 Federal Register on 9/10/2012. Since that time, multiple engineering feasibility-level studies have been conducted to refine the alternatives analyzed in the EIS. This EIS will be ongoing in FY 2018-2019. The schedule currently calls for distribution of the final EIS in the second quarter of 2019.
	The Notice of Availability for the final EIS for the Glen Canyon Dam Long-Term Experimental and Management Plan (LTEMP) was published in the Federal Register on October 7, 2016 and the Record of Decision was signed by the Secretary on December 15, 2016.
Columbia and Snake River Salmon Recovery Project	Applicable NEPA documentation will be completed before individual actions are undertaken. A recent example is the Middle Entiat River Habitat Improvement EA and associated FONSI expected in 2019.
	Consideration is being given to completing a programmatic NEPA document for habitat actions taken by the Columbia and Snake River Salmon Recovery Office. This effort is likely to be started in 2019 or 2020.
Columbia Basin Project	Columbia River System Operations EIS: The U.S. Army Corps of Engineers, Bureau of Reclamation, and Bonneville Power Administration, as co-lead agencies, are preparing an environmental impact statement (EIS) in accordance with the National Environmental Policy Act on the operations and configurations for 14 Federal projects in the Columbia River System in the interior Columbia River Basin. Initial Draft EIS expected in 2019, Record of Decision (ROD) expected in 2020.
	Leavenworth Surface Water Intake Rehabilitation: A co-lead EIS is expected with the USFWS in connection with the Biological Opinion regarding operations and maintenance of the Leavenworth Hatchery facilities for listed fish. A Notice of Intent (NOI) for this project is expected to in 2019 or 2020, a ROD will likely be forthcoming in 2020 or 2021.
	Leavenworth Rearing Units: A co-lead Environmental Assessment (EA) is expected with the USFWS in connection with the Biological Opinion regarding operations and maintenance of the Leavenworth Hatchery facilities for listed fish. The EA is expected to begin in 2019 or 2020, with an anticipated Finding of No Significant Impacts (FONSI) in 2019 or 2020.
	G19-21 Modernization and uprate: Uprate 3 generating units in Grand Coulee's Third Powerplant. The EA and anticipated Finding of No Significant Impacts (FONSI) will be completed in 2019.

Project	Status
· ·	Crescent Bay/North Dam: Proposed Lease of Power-Privilege (LOPP) Project. A Notice of Intent (NOI) for this project is expected in 2019 or 2020, a ROD will likely be forthcoming in 2020 or 2021.
	508-14 Groundwater Management Program: Likely a joint project with State of Washington regarding groundwater use. A Notice of Intent (NOI) for this project is expected to in 2019, a ROD will likely be forthcoming in 2020.
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.
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 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 (SEIS) and a ROD was issued in August 2015. This completes the requirements of the NEPA and fulfills Reclamation's obligation under the court. The Province of Manitoba, Canada and the State of Missouri filed supplements complaints challenging the adequacy of the NEPA analysis. In August 2017 the U.S. District Court ruled that the SEIS was sufficient and lifted the injunction. In October 2017 the Province of Manitoba and the State of Missouri filed Notices of Appeal. In June 2018, Reclamation and the Province of Manitoba reached a settlement to end Manitoba's appeal. Oral arguments for the State of Missouri appeal were held in the U.S. Court of Appeals, District of Columbia Circuit on November 8, 2018 and Reclamation is awaiting a ruling from the appellate court. Central North Dakota: Reclamation released the Final Environmental Assessment and Finding of No Significant Impact

Project	Status
	for the Central North Dakota project in September 2018. Reclamation is preparing for contract negotiations with the Garrison Diversion Conservancy District to enter into a water service contract for the Central North Dakota Project. The project will serve Municipal, Rural, and Industrial (MR&I) water needs within the Missouri River Basin.
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 and the final EIS was published by the EPA on 9/30/2018. The schedule has been extended to allow site-specific engineering data to be incorporated into the NEPA process.
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.
Tualatin Project	Per Reclamation's Directives and Standards (FAC TRMR-95). Reclamation is considering developing additional project benefits in conjunction with a Safety of Dam Modification Project with Clean Water Services. A Notice of Intent (NOI) for this project is expected to 2019, a ROD will likely be forthcoming in 2020.
Solano Project	The following have been completed: Lake Berryessa Visitor Services Plan EIS/ROD 6/2/06; Lake Berryessa Wastewater Treatment Pond Closure and Remediation EA/FONSI 5/27/10; Camp Berryessa EA/FONSI 3/15/11; Oak Shores Trail Construction at Lake Berryessa EA/FONSI (3/29/11); Rehabilitation of North End Trail at Lake Berryessa EA/FONSI(3/29/11); Geotechnical and Geophysical Investigations for the Solano Project Terminal Reservoir EA/FONSI 5/4/12); Napa Berryessa Resort Improvement District – Water and Wastewater Treatment Upgrades and Expansion EA/FONSI 02/21/13; Interim Recreation Services at Lake Berryessa EA/FONSI 05/01/13. Lake Berryessa Long-Term Concession Development Plans EA/FONSI 12/21/2017.
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. Site specific NEPA will be required to implement actions under the RMP.
Yakima Project	An EIS for Kachess drought relief pumping plant and the Keechelus reservoir to Kachess reservoir conveyance was undertaken in 2015. Subsequent changes to the Proposed Action have resulted in a Supplemental Draft Environmental Impact Statement being prepared. The Final Supplemental Environmental Impact Statement and ROD are expected in 2019.

STATUS OF WATER SERVICE AND REPAYMENT CONTRACTS

Project	Status
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-
Animas-La Piata Project	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 non-reimbursable repayment contracts, with the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe are both required before water delivery. The Southern Ute Indian Tribe contract was executed on January 14, 2016. The Ute Mountain Ute Tribe contract has been drafted and is currently being negotiated. The final cost allocation will be completed in FY 2019.
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 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 51.781 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 Settlement that contained several conditions that needed to 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 Settlem

Project	Status
Central Arizona Project (CAP) (Continued)	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 AWSA 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, upon development of their systems.
	Construction of the Non-Indian Distribution System was accomplished under Section 9(d), Reclamation Act of 1939. Ten non-Indian distribution system repayment contracts were executed and validated between 1983 and 1986. These repayment contracts were executed with Maricopa-Stanfield Irrigation and Drainage District, Central Arizona Irrigation and Drainage District, New Magma Irrigation and Drainage District, Harquahala Valley Irrigation District, Chaparral City Water Company, Hohokam Irrigation and Drainage District, Chandler Heights Citrus, San Tan Irrigation District, Queen Creek Irrigation District, and Tonopah Irrigation District.
	On December 3, 1992, the distribution system repayment debt of the Harquahala Valley Irrigation District was extinguished under authority of P. L. 101-628. The District's water was subsequently reallocated with 13,933 acre-feet being committed for the Fort McDowell Indian Water Rights Settlement Act; 18,100 acre-feet committed to the Gila River Indian Community's settlement, and 1,218 acre-feet used in the White Mountain Apache Tribe's settlement. Title to the Harquahala Valley Irrigation District's 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 required the cities to pay for the Hohokam Irrigation and Drainage District distribution system Federal indebtedness.
	Chaparral City Water Company paid in full its repayment obligation with a final payment in 2006.
	The remaining 7 districts were relieved of their debt pursuant to the AWSA. In December 2007, the AWSA, enacted in 2004, became fully enforceable and the remaining non-Indian irrigation districts were relieved of the debt incurred for the construction costs of their distribution systems in exchange for relinquishing their Central Arizona Project non-Indian agricultural priority water. The AWSA made \$73.6 million of the 9(d) debt non-reimbursable and assigned repayment of the remaining portion of the debt to the CAWCD. The 7 districts then executed revised contracts with the U.S., effective January 1, 2008, which relieved them of the remaining capital construction costs, gave them continuing rights to use their distribution systems, and obligations to operate and maintain the systems. The relinquished water was then made available to the Secretary for reallocation in accordance with the provisions of the AWSA.
	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.

Project	Status
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. In December 2016, the Water Infrastructure Improvements for the Nation Act was enacted, enabling CVP contractors to convert water service contracts to repayment contracts by December 2021. Negotiations with all applicable and interested contractors will begin in March 2019. The status of contract renewals is discussed below.
American River Division Auburn-Folsom South Unit Delta Division	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. Sacramento County Water Agency's long-term water service (Fazio) contract was executed in 1999. The City of Roseville, Placer County Water Agency, Sacramento County Water Agency, and Sacramento Municipal Utility District (SMUD) have entered into interim renewal contracts. All long-term renewal contracts have been negotiated with the remaining entities and awaiting execution pending the completion of the reconsultation on the CVP long-term operations plan. In addition, one new water service contract (Fazio contract) with El Dorado County Water Agency, a new entity, remains to be negotiated.
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 completion of the reconsultation of the CVP long-term operations plan. San Luis Water District has requested a partial assignment to the Santa Nella County
Mendota Pool	Water District, which would add one contractor and one contract to the Unit. There are eleven contracts in this unit. Of the eleven contracts, six are water service/settlement contracts, four are settlement contracts, and the
Exchange Contractors	remaining contract is a water service contract. A new settlement contract with Virginia L. Lempesis was executed in 2013.
East Side Division New Melones Unit	There are four exchange contractors (Central California ID, Columbia Canal Co., Firebaugh Canal Co. and San Luis Canal Co.) sharing one contract in perpetuity.
Friant Division Friant-Kern/Madera Canals	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.
Than Tens Madeia Canalis	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.

Project	Status
Central Valley Project (Continued) Friant Division Cross Valley Canal	There are 8 water service contracts with 7 entities in this uit. These entities have entered into interim renewal contracts. Negotiations have been completed for long-term renewal contracts with all of the Cross Valley Canal contractors, and execution will occur after environmental reviews are completed. Since conveyance facilities owned by the State of California (State) are needed to deliver the CVP water, negotiation for a separate conveyance agreement with the State was completed in 2014. The Cross Valley contractors have requested a long-term conveyance agreement once they have converted to repayment contracts.
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.
Corning/Tehama-Colusa Canals	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.
Colusa Drain	There is one contract in this unit. The Colusa Drain Mutual Water Company entered into a long-term renewal contract for a replacement water supply in 2005.
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.
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.
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 completion of the reconsultation on the CVP long-term operations plan. Pacheco WD's existing long-term water service contract does not expire until February 29, 2024.

Project	Status
D	
Central Valley Project (Continued) 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 completion of the reconsultation on the CVP long-term operations plan. 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 while the Coachella Canal Lining Project is in construction or as long as the San Luis Rey are receiving up to 16,000 afy conserved by the project or receiving payment in lieu of water delivery if unable to take water.
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 35 percent of the construction costs of the Project that are allocable to the paying entity. 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 (GDCD) and three-way contracts between Reclamation, GDCD, and Irrigation Districts, containing approximately 250,000 acres of irrigable land, was completed March 16, 1966. Court validation was completed July 26, 1966, and confirmed August 10, 1966. Renegotiation of the master contract to conform to the reformulation legislation must occur prior to Federal construction activity in the authorized irrigation areas. The Dakota Water Resources Act of 2000 stated an appropriate repayment contract shall be negotiated that providers for the making of a payment for each payment period in an amount that is commensurate with the percentage of the total capacity of the project that is in actual use during the payment period. A long-term, 40-year water service contract (129E620001) and project use power contract (12XX620033) with GDCD for the Turtle Lake and McClusky Canal irrigation areas, was executed in April of 2012. Reclamation and GDCD are entering into negotiations on a long-term water service contract for municipal rural and industrial (MR&I) water to Central North Dakota from the Principal Supply Works. Turtle Lake and McClusky Canal irrigation and MR&I water to Central North Dakota are being constructed without Federal funds. Repayment contract negotiations with GDCD are anticipated after this MR&I water service contract is executed. Reclamation and GDCD are also entering into negotiations for the O&M transfer of the principle supply works.
Southern Arizona Water Rights Settlement Act Project Coloredo Bia Thompson Brainst	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.
Colorado-Big Thompson Project	Individual contracts set to expire by 2020 – Four individual water service contracts for irrigation, municipal/domestic and industrial uses for approximately 27 acre/feet. Payments vary with use from \$6 -\$55/acre-foot and \$15/acre-foot stand-by charge. Negotiations for requested renewal contracts will determine repayment terms.

Status of Water Service and Repayment Contracts

Project	Status
Boysen Unit, P-SMBP	Individual Contract set to expire in 2020– Currently there are two water service contracts for irrigation and supplemental municipal water for up to 216 acre-feet. Payment consists of \$10-\$32.50 per acre-foot and annual OM&R. Negotiations for requested renewal contracts will determine repayment terms.