

FY 2011 WaterSMART Water and Energy Efficiency Grants

Arizona

City of Surprise, Arizona, Vadose Zone Recharge Wells Capital Improvement Project
Reclamation Funding: \$1,000,000 **Total Project Cost: \$4,517,600**

The City of Surprise will expand its existing recharge system by constructing 10 new recharge wells and additional conveyance pipelines to directly recharge an aquifer with 3.6 million gallons of excess reclaimed water daily. This project is expected to result in water savings of 4,000 acre-feet of water per year.

California

City of Watsonville, Corralitos Creek Water Supply and Fisheries Enhancement Project
Reclamation Funding: \$1,000,000 **Total Project Cost: \$5,346,000**

The City of Watsonville will improve its surface water treatment facilities to allow increased diversions from Corralitos Creek during higher turbidity winter flows. The project is expected to lead to reduced summer diversions, allowing more water to remain in the creek during low flow periods and improving the timing of flow for fisheries. The project also includes installation of solar panels that will provide 65% of the electricity needed to operate the new facility.

Kaweah Delta Water Conservation District, Paregien Basin Project
Reclamation Funding: \$ 918,500 **Total Project Cost: \$1,850,000**

The Kaweah Delta Water Conservation District will construct a levee perpendicular to Deep Creek and will also construct a check structure with automated gates, advanced flow management, and a Supervisory Control and Data Acquisitions system. Once the project has been completed, the District will be able to increase groundwater recharge by utilizing otherwise unstorable storm and flood waters in the recharge basin along Deep Creek. The project is expected to result in the better management of approximately 39,000 acre-feet of water per year.

Richvale Irrigation District, Water Management System Modernization & Efficiency Project
Reclamation Funding: \$142,900 **Total Project Cost: \$291,588**

The Richvale Irrigation District will implement an online Geographic Information System and irrigation flow-event recording system, which will enable the District to improve flow management, reduce leaks and spills, and conserve water by providing continuous feedback on consumption to growers. The project is expected to save 11,500 acre-feet of water annually, which will remain in the Butte Basin for other water users.

Shasta Community Services District, Efficiency & Modernization Project
Reclamation Funding: \$164,200 **Total Project Cost: \$355,388**

The Shasta Community Services District near Redding, California will implement an online Geographic Information System and will integrate data from 526 new radio-read metering and 15 Supervisory Control and Data Acquisition loggers into that system. The online geographic information system will provide real-time consumption feedback to users along with more accurate metering, thereby improving the District's infrastructure management. This project is expected to result in an annual water savings of 200 acre-feet, which will remain in Whiskeytown Lake.

Natomas Central Mutual Water Company, Bennett Drain Pump & County Line Check and Lift Pump: Diesel to Electric Conversion

Reclamation Funding: \$189,200

Total Project Cost: \$378,400

The Natomas Central Mutual Water Company will replace diesel engines with electrical motors, install flow meters and variable frequency drives, and integrate improvements into the company's Supervisory Control and Data Acquisition system to improve water management, increase energy efficiency, and quantify tailwater recovery. Variable speed drives will optimize tailwater recovery at each location, which is expected to result in water savings of 1,500 acre feet of water per year. Conserved water will be used to reduce demand for Sacramento River diversions.

North San Joaquin Water Conservation District, Tracy Lake Groundwater Recharge Project

Reclamation Funding: \$300,000

Total Project Cost: \$854,700

The North San Joaquin Water Conservation District will divert Mokelumne River high flows to Tracy Reservoir to recharge groundwater pumping through the Tracy Lake bed in the critically overdrafted Eastern San Joaquin County Groundwater Basin. The project is expected to result in water savings of 3,000 acre-feet per year by capturing Mokelumne River high flows that are currently lost to spills and evaporation. Conserved water will allow farmers in the area to replace groundwater pumping with water diverted from Tracy Lake.

Ivanhoe Irrigation District, Control System Project- 69 Main

Reclamation Funding: \$300,000

Total Project Cost: \$833,000

The Ivanhoe Irrigation District, near Visalia, California, will automate its existing irrigation system by relocating its flow control point downstream and automating five control ingate valves. By automating the 69 Main distribution system, the District will reduce spills from ends of the pipelines and improve water delivery efficiencies in a water short area.

Contra Costa Water District, Untreated Water Use Measurement Project

Reclamation Funding: \$282,510

Total Project Cost: \$569,447

The Contra Costa Water District will install 100 residential water meters so that customers can be charged based on actual water use. The project is expected to result in water savings of 115 acre- annually that will be left in the Bay Delta to be made available for other water users and to benefit endangered species, particularly in years of water shortage.

City of Huntington Beach, California, Computerized Central Irrigation Controller System

Reclamation Funding: \$175,000

Total Project Cost: \$398,908

The City of Huntington Beach, California will install new irrigation controllers and computer systems to reduce runoff in 45 parks throughout the City. The project is expected to result in water savings of 225 acre-feet per year, reducing demands on State Water Project and Colorado River water.

City of Redwood City, Residential Water Meter Replacement Program

Reclamation Funding: \$300,000

Total Project Cost: \$3,000,000

The City of Redwood City will replace 7,500 residential meters with new automated water meters to provide near real time water consumption data to customers. The project is expected to result in water savings of 540 acre-feet annually. Conserved water will remain in the Tuolumne River or may be diverted to the Hetch Hetchy water system where it will be marketed wholesale to other customers.

Municipal Water District of Orange County, Orange County Smart Irrigation Timer Rebate Program

Reclamation Funding: \$299,961

Total Project Cost: \$2,138,627

The Municipal Water District of Orange County will provide rebates to facilitate the installation of 800 commercial and 475 residential Smart Irrigation Timers, which will reduce water consumption, irrigation run-off, and non-point source pollution. The project has an expected annual water savings of 560 acre-feet, which will help to reduce groundwater pumping and reduce reliance on imported water from the Colorado River and State Water Project.

Imperial Irrigation District, East Highline Power Plant Flow Meter

Reclamation Funding: \$28,825

Total Project Cost: \$57,650

The Imperial Irrigation District will automate hydropower plants along the All-American Canal by replacing existing governor controls with digital control systems to improve accuracy of inflow measurements to the power plant. This project is expected to reduce spills by improving management of the water that flows through the hydro-plant, resulting in estimated water savings of 1,460 acre-feet per year.

East Bay Municipal Utility District, Water Smart Lawn Conversion Rebate Program

Reclamation Funding: \$300,000

Total Project Cost: \$666,742

The East Bay Municipal Utility District will expand its existing lawn conversion rebate program to provide additional financial incentives for the replacement of residential and commercial water intensive lawns with sustainable landscapes. This project is expected to result in water savings of 69 acre-feet of water annually, which will be left in the system for other uses.

Reclamation District 2035, Acquisition and Installation of SCADA Phase 2

Reclamation Funding: \$287,700

Total Project Cost: \$591,466

Reclamation District 2035 will install Supervisory Control and Data Acquisition infrastructure on four pumping plants, nine water monitoring plants, and four wells to remotely operate and monitor water conveyance within their system. The project is expected to result in 500 acre-feet of water savings annually through elimination of spills. Conserved water will be left in the Sacramento River.

The Metropolitan Water District of Southern California, California Friendly Turf Replacement Incentive Program

Reclamation Funding: \$1,000,000

Total Project Cost: \$2,000,000

The Metropolitan Water District of Southern California will provide incentives under the California Friendly Turf Replacement Incentive Program to transform approximately 2 million square feet of irrigated turf to water efficient landscapes with climate-appropriate plants, efficient irrigation, permeable surfaces to allow rainwater infiltration, and mulch to preserve soil moisture. The project is expected to result in water savings of 276 acre-feet per year. Water conserved through this project will help avoid future water supply shortages related to population growth, climate change, and drought, amongst other stressors.

Bella Vista Water District, Water Metering and Irrigation Efficiency Improvements

Reclamation Funding: \$70,986

Total Project Cost: \$148,666

The Bella Vista Water District will install an automated California Irrigation Management Information System weather station, 281 data loggers, 10 smart irrigation meters, and five compound water meters. The District will also perform 50 landscape irrigation audits within its service area. The project is expected to result in water savings of 350 acre-feet of water per year.

Colorado

Florida Farmers Ditch Company, Water Loss Reduction Project - Phase II Ditch Lining Project

Reclamation Funding: \$835,900

Total Project Cost: \$1,671,800

The Florida Farmers Ditch Company, in Durango, Colorado, will line 1.8 miles of open canal with concrete to address seepage losses. The project is expected to result in 2,020 acre-feet of water savings per year. A portion of the water conserved through the project will be stored in Lemon Reservoir for other users in the basin. The project is also expected to increase the reliability of water supplies for existing irrigated agriculture.

Idaho

Boise Project Board of Control, Hydroelectric Project

Reclamation Funding: \$ 578,938

Total Project Cost: \$1,736,814

The Boise Project Board of Control will develop an 839-kilowatt capacity power plant at the "Fargo Drop," which will generate hydroelectric power that will be sold to the Idaho Power Company. The project will also include installation of a Supervisory Control and Data Acquisition system to improve regulation flows below the Fargo Drop diversion, in the Deer Flat Low Line Canal. The project is expected to result in 3,218 acre-feet of water savings annually that will be transferred to irrigation users to improve reliability in water short years.

South Board of Control, Gravity Pressure Project

Reclamation Funding: \$300,000

Total Project Cost: \$673,069

The South Board of Control in Owyhee, Idaho will convert open lateral canals to closed pipe to supply gravity flow pressurized irrigation water to farm units. The project is expected to conserve 3,300 acre-feet of water annually that is currently lost to evaporation and seepage, head gate leakage, and tail end spills. Conserved water will be stored in Owyhee Reservoir and used to supplement existing water supplies for future needs.

Lake Reservoir Company, Modernization and Upgrading Reservoir Control at Lardo Dam, Big Payette Lake

Reclamation Funding: \$297,000

Total Project Cost: \$594,000

The Lake Reservoir Company will replace six stop logs with automatic control gates at the Lardo Dam on Big Payette Lake in southwestern Idaho. Remote telemetry control and constant monitoring will improve flow control through Lardo Dam, resulting in improved water level management with an anticipated water savings of 3,000 acre-feet annually.

Lewiston Orchards Irrigation District, Irrigation Delivery Metering Project for the Lewiston Orchards Project

Reclamation Funding: \$299,929

Total Project Cost: \$686,687

The Lewiston Orchards Irrigation District in Lewiston, Idaho, will purchase and install 809 radio read irrigation meters throughout the District to provide point of delivery measurement. The project is expected to result in water savings of 128 acre-feet annually, which will be left in the Snake River to help maintain summer streamflows for endangered steelhead.

Black Canyon Irrigation District, Realign Portion of D-Line Canal

Reclamation Funding: \$50,750

Total Project Cost: \$101,500

The Black Canyon Irrigation District in Idaho will replace 5,350 feet of open ditch with 2,380 feet of pipe in an area prone to water loss. The project is expected to result in water savings of 540 acre-feet annually by addressing evaporation and seepage. Conserved water will be held over in the Cascade Reservoir and placed into a water bank that will make water available to junior diverters, downstream users, and to benefit salmon recovery.

Kansas

Webster Irrigation District, No.4, Open Lateral Conversion to Buried Pipeline

Reclamation Funding: \$118,500

Total Project Cost: \$237,000

The Webster Irrigation District No. 4 in Kansas will convert approximately two miles of open ditch lateral to buried PVC pipe to address seepage losses. The project is expected to conserve 588 acre-feet of water each year, which will be left in the Webster Reservoir, located on the South Fork of the Solomon River. The District estimates that approximately 62,000 kilowatt hours of energy per year will be saved due to decreased pumping needs.

Montana

Fort Shaw Irrigation District, Improving Fort Shaw Irrigation District Infrastructure to Improve Sun River Flow and Water Quality

Reclamation Funding: \$103,717

Total Project Cost: \$222,367

The Fort Shaw Irrigation District will upgrade its delivery system by replacing open ditches with 4,860 feet of PVC pipe to address water that is currently being lost to seepage. The project is expected to conserve 4,158 acre-feet of water annually. Water saved as a result of the project will be left in the Sun River which has gone dry below the District's headworks on numerous occasions in the past 10 years.

Sidney Water Users District, Increasing Irrigation Efficiency

Reclamation Funding: \$297,292

Total Project Cost: \$594,585

The Sidney Water Users Irrigation District, in Eastern Montana, will replace 3.1 miles of open lateral canals with PVC pipeline and will install flow meters at turnouts to improve water efficiency. The project is expected to result in 1,510 acre-feet of conserved water annually by reducing seepage and surface runoff. The District estimates that the project will reduce energy consumption by 179,100 kilowatt-hours per year through reduced pumping. Water conserved as a result of this project will be used to improve late season irrigation reliability and to enhance Yellowstone River flows.

Nebraska

Bostwick Irrigation District in Nebraska, Water Conservation Project Converting Open Ditch to Buried Pipe

Reclamation Funding: \$250,000

Total Project Cost: \$648,036

The Bostwick Irrigation District will convert 8.30 miles of open ditch canal to buried PVC pipe. Converting the open ditch to pipe is expected to save water and will allow for the accumulation of head pressure to minimize the need for pumping. The project is expected to conserve 1,611 acre-feet of water annually that is normally lost to seepage and evaporation. The project also includes installation of a variable frequency drive to increase pumping efficiency. Water conserved as a result of the project will be stored in the Harlan County Reservoir, on the Republican River, for use during drought years.

Frenchman-Cambridge Irrigation District, Bartley Canal Pumping Plant and Pipeline Project

Reclamation Funding: \$754,148

Total Project Cost: \$1,633,448

The Frenchman-Cambridge Irrigation District will install 10,500 feet of PVC pipe to supply water to the Bartley Canal. The project will enable the District to divert storage water from the Harry Strunk Reservoir, rather than the Swanson Reservoir 40 miles away. The District estimates that 4,660 acre-feet of water per year will be saved through the elimination of conveyance losses. The District expects this project to assist in maintaining compliance with the Republican River Compact.

Nevada

Pershing County Water District, Humboldt River Automation Metering and Hydropower Project

Reclamation Funding: \$773,100

Total Project Cost: \$1,546,200

The Pershing County Water District will automate its gates, will install solar powered ultrasonic meters, and will install 750-kilowatt capacity hydropower turbines to generate renewable energy at the Rye Patch Dam. The hydropower turbines installed as part of this project are expected to generate 2,900 megawatt-hours of electricity annually.

Southern Nevada Water Authority, Water Smart Landscapes Rebate Program

Reclamation Funding: \$611,590

Total Project Cost: \$6,000,000

The Southern Nevada Water Authority will expand its existing rebate landscape rebate program, which provides a financial incentive for residential property owners to replace turf with water efficient landscaping. The project is expected to result in the replacement of approximately 4.6 million square feet of turf with an expected water savings of 790 acre-feet per year. Water conserved through this project will be left in the Colorado River for instream uses in the historically threatened Colorado River Basin and will contribute to existing water banks in California, Arizona, and Southern Nevada.

Big Bend Water District, Leak Detection and Filter Flow Meter Project

Reclamation Funding: \$197,505

Total Project Cost: \$395,010

The Big Bend Water District will help conserve and sustain water resources by identifying and minimizing water leakage in Laughlin, Nevada. The project also includes the installation of filter flow meters at an existing water treatment plant to increase treatment efficiency. The project is expected to conserve 225 acre-feet of water annually.

New Mexico

Arch Hurley Conservancy District, Sodium Bentonite Application to Prevent Water Loss in High Seepage Areas within the Water Delivery System of the Arch Hurley Conservancy District

Reclamation Funding: \$51,000

Total Project Cost: \$122,713

The Arch Hurley Conservancy District in New Mexico will undertake an additional phase of its continuing efforts to address water loss in high seepage areas through the application of bentonite, a sealant that creates an impenetrable liner. The elimination of seepage in this portion of the canal is expected to result in savings of approximately 2,000 acre-feet of water annually in an area where full water allocations are frequently impossible and water is allocated through rationing.

Oregon

Three Sisters Irrigation District, Main Canal Pipeline Penstock Hydro Project

Reclamation Funding: \$859,149

Total Project Cost: \$3,372,728

The Three Sisters Irrigation District will replace 20,000 feet of open canal with polyethylene pipe, an improvement expected to result in 750 acre-feet of water savings annually in the water-short Upper Deschutes Basin in Oregon. Water conserved through this project will be marketed through the Deschutes River Conservancy for a protected instream right, to support critical habitat for Bull Trout, Red band Trout, Summer Steelhead and Chinook Salmon. The District will also install a 950-kilowatt capacity turbine generator as part of the project, a renewable source of energy that the District expects to supply 3.1 million kilowatt-hours of electricity.

Tumalo Irrigation District, Phase 3 Piping of the Tumalo Feed Canal

Reclamation Funding: \$850,000

Total Project Cost: \$1,700,000

The Tumalo Irrigation District will convert 6.3 miles of canal to pipeline to complete the final phase of its effort to pipe the Tumalo Feed Canal. This project is expected to save 474 acre-feet of water per year that is currently being lost to seepage. Conserved water will be dedicated to the State of Oregon for permanent instream flows to benefit endangered species such as the Chinook Salmon, Steelhead, and Bull Trout.

North Unit Irrigation District, Water & Energy Conservation Initiative

Reclamation Funding: \$1,000,000

Total Project Cost: \$4,391,347

The North Unit Irrigation District will line approximately 5 miles of the Main Canal to address seepage losses. The project is expected to result in 7,880 acre-feet of water savings annually. Conserved water will be used to restore instream flows in the Crooked River. The District estimates that approximately 1,220 megawatt-hours of electricity will be saved annually through pumping reductions.

The Umatilla Groundwater Exchange: A Program for Managed Aquifer Recharge, Groundwater Recovery and Instream Flow Restoration in the Umatilla Basin

Reclamation Funding: \$300,000

Total Project Cost: \$1,053,000

The Umatilla Basin Water Commission in Oregon will establish a new water market to facilitate groundwater exchanges to recharge the Umatilla Basin. Through the market, water from the Columbia and Umatilla Rivers will be made available for purchase by water users who currently rely on overdrafted groundwater supplies. Improved base flows and better water quality are expected to benefit endangered species, such as Steelhead, Bull Trout, and Lamprey.

The Owyhee Irrigation District, Lower Owyhee River Rehabilitation Project

Phase I: Water Conservation and Non-point Source Pollution Reduction in Owyhee and Snake Rivers

Reclamation Funding: \$299,946

Total Project Cost: \$891,842

The Owyhee Irrigation District in Malheur County, Oregon will convert 2.9 miles of open ditch lateral to pipe to supply gravity flow pressurized irrigation water to farm units. The District will also install automated gates, a solar powered automated side sweep cleaner, and nine Micrometer propeller flow meters to improve the operational efficiency of the delivery system. The project is expected to conserve 194 acre-feet of water per year which will be stored in the Owyhee Dam for use by downstream users, especially during drought years. In addition, once the pressurized pipeline has been installed, this project could enable landowners the ability to convert 970 acres from furrow to sprinkler irrigation.

Texas

Adams Gardens Irrigation District, Natural Gas Engine for River Pump, Wind Powered Reservoir Pump and Water for Wildlife Refuge Resaca

Reclamation Funding: \$300,000

Total Project Cost: \$600,000

The Adams Gardens Irrigation District will install a natural gas engine and wind powered pump to more effectively allocate water among two reservoirs that are a part of the District's delivery system. By reducing seepage losses in one reservoir and better managing existing diversions, the District estimates that 590 acre-feet of water per year will be saved. A portion of the water conserved as a result of the project will be transferred to the Lower Rio Grande Valley National Wildlife Refuge, located outside of the District, which manages habitat supporting 19 federally threatened and endangered species and 57 state protected species.

Edwards Aquifer Authority, Edwards Aquifer Regional Water Conservation Program

Reclamation Funding: \$ 300,000

Total Project Cost: \$757,000

The Edwards Aquifer Authority in San Antonio, Texas will implement a regional water conservation program providing economic incentives for a range of water efficiency improvements. The program will include the replacement of inefficient plumbing fixtures such as toilets and showerheads. The Authority will also provide rebates for conversion of commercial/industrial equipment to more water efficient technologies and for equipment to implement graywater and rainwater collection. Conserved water will assist the District in meeting its goals to conserve Edwards groundwater under a Regional Conservation Program. By implementing this program the Authority expects to reduce the need for aquifer pumping by 692 acre-feet per year and reduce energy consumption by approximately 790,000 kilowatt hours per year.

Hidalgo County Irrigation District, No. 2, Retrofit of the existing check gate structures of the Lateral E Canal

Reclamation Funding: \$300,000

Total Project Cost: \$1,319,594

The Hidalgo County Irrigation District No. 2 will modernize the operation of the Lateral E canal by retrofitting 16 existing automated checkgate structures with flume gates and installing solar powered Supervisory Control and Data Acquisition units to increase efficiency. The project is expected to result in water savings of 895 acre-feet per year, which is expected to reduce energy requirements due to pumping by approximately 128,000 kilowatt hours per year. Water conserved as a result of the project will be left in the Rio Grande.

Hidalgo County Irrigation District, No. 2, Retrofit of the existing check gate structures of the Lateral A Canal

Reclamation Funding: \$300,000

Total Project Cost: \$844,973

The Hidalgo County Irrigation District No. 2 will modernize the operation of the Lateral A canal by retrofitting seven existing automated check gate structures with flume gates and installing solar powered Supervisory Control and Data Acquisition units to increase efficiency. The project is expected to result in water savings of 320 acre-feet per year, which is expected to reduce energy requirements due to pumping by approximately 25,000 kilowatt hours per year. Water conserved as a result of the project will be left in the Rio Grande.

Delta Lake Irrigation District, A-9 Canal to Pipeline Conversion Project

Reclamation Funding: \$296,446

Total Project Cost: \$599,532

The Delta Lake Irrigation District in Texas will replace 9,030 linear feet of an existing canal with enclosed PVC pipe. The project is expected to save 343 acre-feet of water annually that will remain in the Rio Grande River for downstream use. The District estimates that the project will also result in energy savings of approximately 13,000 kilowatt hours each year by reducing pumping needs.

Hidalgo County Improvement District, Replacement of the Balboa Pipeline, Wind Powered Well Pump and Wildlife Corridor

Reclamation Funding: \$286,794

Total Project Cost: \$573,589.52

The Hidalgo County Improvement District will install 6,200 linear feet of PVC pipeline to address water currently being lost to leaks in an existing mortar joint pipeline. The District expects to save 244 acre-feet of water once the project is completed. Conserved water will remain in the Lower Rio Grande system for allocation to other users. The project also includes installation of a wind powered pump on an existing well, an improvement expected to reduce energy requirements of groundwater pumping by approximately 7,800 kilowatt hours per year.

Cameron County Irrigation District No. 2, S2 Canal to Pipeline Conversion Project

Reclamation Funding: \$286,265

Total Project Cost: \$577,030

Cameron County Irrigation District No. 2 will convert one mile of concrete lined canal to underground reinforced concrete pipeline. The project, which will also include installation of new measurement devices and tertiary pipeline turnouts, is expected to conserve 171 acre-feet of water per year. Water conserved as a result of the project will remain in the Rio Grande for downstream use. The District expects to reduce energy consumption by approximately 6,655 kilowatt hours each year by reducing pumping requirements.

Utah

Weber Basin Water Conservancy District, Upper Willard Canal Lining and Water Marketing Project

Reclamation Funding: \$ 998,928

Total Project Cost: \$2,178,400

The Weber Basin Water Conservancy District will line 3,100 feet of the Upper Willard canal with concrete to prevent loss of water within the system. This project was previously identified as a high priority for the District through a System Optimization Review conducted with Reclamation funding. The project is expected to conserve 7,400 acre-feet of water per year in an area with significant projected population growth. The District will also install a solar-powered Supervisory Control and Data Acquisitions system and two acoustic flow meters. Conserved water will be marketed to new or existing customers through water lease and exchange agreements.

East Hoytsville Ditch Company, Pressurized Irrigation Project

Reclamation Funding: \$1,000,000

Total Project Cost: \$4,500,000

The East Hoytsville Ditch Company will replace its existing open ditch systems with over 15 miles of pipe, lateral pipelines, and turnouts to create a single pressurized irrigation system. The project will reduce seepage and water losses, resulting in an expected annual savings of 3,800 acre-feet of water, which will be left in the Rockport Reservoir or will be made available to users downstream at the Echo Reservoir. Meters will be installed on the main pipelines at each turnout to accurately measure and efficiently use water.

Cub River Irrigation Company, West Lewiston Pressurized Irrigation System

Reclamation Funding: \$1,000,000

Total Project Cost: \$2,800,000

The Cub River Irrigation Company will convert 6,000 acres currently served by open canals into a combined pressurized irrigation system. Once the project has been completed, water will be pumped from the Bear River, injected into the irrigation system, and distributed to approximately 40 individual metered users. The project is expected to result in 3,000 acre-feet of water savings per year by eliminating evaporation, seepage, and tailwater losses at the ends of laterals. Conserved water will remain in the Bear River for use by downstream users.

Kays Creek Irrigation Company, Kays Creek Middle Fork and Hobbs Reservoir Water Conservation and Water Marketing Project

Reclamation Funding: \$162,272

Total Project Cost: \$324,544

The Kays Creek Irrigation Company in Utah will replace 3,200 feet of precast concrete pipe with HDPE pipe. The District will also reconstruct a diversion structure on the Middle Fork of Kays Creek to capture available water and to allow for system pressurization. The project also includes installation of a magnetic meter and Supervisory Control and Data Acquisition system downstream of the new diversion structure to improve water management. The project is expected to result in water savings of 1,065 acre-feet per year, which will be stored in Hobbes Reservoir and marketed to the City of Layton and other users.

Draper Irrigation Company/ Waterpro, Bear Canyon Intake Relocation

Reclamation Funding: \$108,604.88

Total Project Cost: \$219, 403

The Draper Irrigation Company in Salt Lake County, Utah will convert approximately 2,300 feet of open channel to 12-inch pipe. The project also includes construction of a new diversion structure in Bear Canyon at an elevation that would allow water to flow via gravity to an existing water treatment plant, eliminating the need to use pumps at the existing Bear Canyon Pump Station. The project is expected to improve energy efficiency and result in water savings of 413 acre-feet annually by reducing seepage within the system. Conserved water will be made available to the Jordan Valley Water District and other entities downstream.

Payson City Corporation, Pressurized Irrigation Water Meters

Reclamation Funding: \$300,000

Total Project Cost: \$601,260

Payson City Corporation will install 1100 individual residential irrigation meters with radio telemetry to the existing Payson City Secondary Pressurized Irrigation System. Through this project, Payson City will be able to monitor irrigation usage throughout the city. The project is expected to save approximately 170 acre-feet of water per year. Conserved water will reduce reliance on groundwater and will be put back into Peteetneet Creek to be used by other users.

Dry Gulch Irrigation Company, Hancock-State Road Salinity Reduction Project

Reclamation Funding: \$300,000

Total Project Cost: \$1,254,750

The Dry Gulch Irrigation Company will replace 9,250 feet of open canal with enclosed pipe and will install a Parshall flume to improve water management in an area where drought is a continuing concern. By reducing seepage, the project is expected to reduce diversions from the Lake Fork River by 2,450 acre-feet of water per year.

Washington

Whitestone Reclamation District, Piping, Pumping, Pivots and Power: Improving Water and Energy Efficiency

Reclamation Funding: \$406,331

Total Project Cost: \$813,708

Whitestone Reclamation District, in Loomis, Washington, will line 1200 feet of canal and install 2200 feet of PVC pipe to address seepage and water losses. As part of the project, the District will work with landowners to install more efficient irrigation systems such as center pivots with micro sprinkler heads. The project is expected to result in annual water savings of 331 acre-feet once completed. The District will also install two turbine generators, which together have a capacity of 205 kilowatts, at the Spectacle Lake outlet. The hydropower turbines installed as part of this project are expected to generate approximately 1,355 megawatt hours annually.

Gardena Farms Irrigation District #3, Gardena Farms Irrigation District Pipeline Construction Project--Phase 2 (North Lateral)

Reclamation Funding: \$1,000,000

Total Project Cost: \$2,375,000

Gardena Farms Irrigation District #3 will replace a section of an existing open ditch conveyance system with 9 miles of gravity-feed pipeline and laterals and will modify 15 on-farm pump stations. The project is expected to result in water savings of 1,468 acre-feet each year through the elimination of seepage, evaporation, and operational spills. Saved water will be transferred to the Washington Department of Ecology's Trust Program as a protected instream flow to benefit Chinook salmon.

East Columbia Basin Irrigation Company, Conversion of 85,440 feet of Open Canals to Pipelines

Reclamation Funding: \$1,000,000

Total Project Cost: \$3,030,000

The East Columbia Basin Irrigation Company will convert 85,440 feet of open ditch to pipelines to address seepage losses. The project is expected to result in water savings of 8,842 acre-feet each year. Conserved water will be left in the Columbia River or used to reduce the amount of groundwater pumped for irrigation to address significant aquifer depletion concerns. The project is expected to lead to energy savings of approximately 4,300,000 kilowatt hours through reduction in the amount of water pumped through Grand Coulee Dam.

Kennewick Irrigation District, Ethylene Propylene Diene (EPDM) Main Canal Lining Project

Reclamation Funding: \$300,000

Total Project Cost: \$1,145,010

The Kennewick Irrigation District will line 17,900 linear feet of existing earthen canal with geomembrane liner, an improvement expected to result in water savings of 1,244 acre-feet per year. A portion of the water will be used to meet existing water needs. The District anticipates that 2,100 acre-feet per year of water conserved as a result of the project will remain instream for additional fishery habitat in the Yakima River Basin.

Roza Irrigation District, Enclosed Conduit Project

Reclamation Funding: \$300,000

Total Project Cost: \$827,812

The Roza Irrigation District in Yakima, Washington will convert 4.6 miles of open lateral canal to pipe. The project is expected to result in water savings of 346 acre-feet per year through reduced pumping. Conserved water will be made available to stretch supplies within the Roza Irrigation District, or may be left in the Yakima River Basin for instream flow.

South Columbia Basin Irrigation District, Potholes East Canal Shotcrete Liner

Reclamation Funding: \$300,000

Total Project Cost: \$654,076

The South Columbia Basin Irrigation District, located north of Pasco, Washington, will line 3,000 linear feet of canal with a geotextile membrane to prevent seepage. The project is expected to result in water savings of 882 acre-feet per year, which will be left in the Columbia River for downstream use.

Wyoming

Shell Valley Watershed Improvement District, Highline Canal Pipeline Enclosure & Integration Project

Reclamation Funding: \$ 703,927

Total Project Cost: \$1,517,045

The Shell Valley Watershed Improvement District will install a pipeline to enclose the Highline Canal, an improvement expected to result in water savings of 1,376 acre-feet per year that is currently lost to seepage, evaporation, and canal breach. The District will also install meters to provide accurate measurement of total flow volumes within the canal.