

2023 WaterSMART Grants Water and Energy Efficiency Grants

Arizona

Buckeye Water Conservation and Drainage District, Diversion Intake Structure **Modernization & Canal Energy System Project** Reclamation Funding: \$5,000,000

The Buckeye Water Conservation and Drainage District, located near Phoenix, will modernize the existing concrete diversion intake structure on the Gila River, convert 600 feet of the earthen Main Canal to concrete, and install a Canal Energy System, which includes an 876-kilowatt solar array over the Main Canal and in-line micro hydrokinetic turbines. The district will also install a new sluice structure, flow control, and a Supervisory Control and Data Acquisition system. In addition, the project includes the construction of a regulating reservoir to capture winter flows in the Gila River and allow for reduced groundwater pumping during the growing season. The project is expected to result in annual water savings of 16,639 acre-feet, which is currently lost to evaporation, seepage, operational spills, and over-deliveries. Conserved water will remain in the Gila River for longer periods, increasing the reliability of the water supply for nearby communities, ecological benefits, and agricultural purposes.

Metropolitan Domestic Water Improvement District, Metro Main Automated Metering Infrastructure Project Reclamation Funding: \$2,000,000

The Metropolitan Domestic Water Improvement District, located near Tucson, will replace 11,234 existing meters for residential, commercial, and irrigation customers with advanced metering infrastructure meters, install electronic endpoints, and install a network of communication equipment. By providing real-time data to customers, the project is expected to result in annual water savings of 1,119 acre-feet, currently lost to leaks. The project will reduce the need for groundwater pumping and Colorado River water.

Town of Cave Creek, Advanced Metering Infrastructure Water Conservation Project Total Project Cost: \$1,087,402 **Reclamation Funding: \$500,000**

The Town of Cave Creek, located in the Sonoran Desert in northern Maricopa County, will convert 2,350 existing outdated water meters to advanced metering infrastructure meters. The town will also install communications network hardware and towers, upgrade to a new meter data management software system, and connect the system to the cloud-based network. The

Total Project Cost: \$5,258,319

Total Project Cost: \$10,149,472

project is expected to result in annual water savings of 148 acre-feet currently lost to leaks, which will reduce the town's demand on Central Arizona Project water.

Town of Gilbert, South Gilbert Regional Advanced Metering Infrastructure Conversion Project

Reclamation Funding: \$1,900,000

Total Project Cost: \$4,828,376

The Town of Gilbert, located near Phoenix, will install 38,642 advanced metering infrastructure (AMI) meters and radios for residential customers, which will be connected to the city's AMI radio network, along with a customer portal. The project is expected to result in annual water savings of 2,172 acre-feet by providing customers with detailed usage and leak detection information on a near real-time basis. The city relies on treated water from the Colorado River and supplements its supplies with groundwater wells to meet demands during summer peaks and planned Water Treatment Plant outages. The conversion to AMI meters will help the city offset its groundwater pumping and continue to meet its water demands.

Paloma Irrigation and Drainage District, Lateral D Modernization Project Reclamation Funding: \$2,000,000 Total Project Cost: \$4,071,897

The Paloma Irrigation and Drainage District, located in Maricopa County, will replace 8 manually controlled Jack Lift gates at check structures and 23 manually controlled slide gates at turnouts along Lateral D with new automated gates and an automated solar-powered Supervisory Control and Data Acquisition system. The project is expected to result in annual water savings of 2,985 acre-feet, which is currently lost to spills and over-deliveries. Conserved water will remain in the Colorado River system for longer periods, improving the reliability of the water supply for communities, benefitting species, and helping to avoid reduced allocations during times of drought.

California

City of Bakersfield, Advanced Metering Infrastructure Installation Reclamation Funding: \$497,117 Total Project Cost: \$994,234

The City of Bakersfield will replace 5,500 existing outdated meters with advanced metering infrastructure (AMI) meters in a residential area that includes over 20,000 residents. The project is expected to result in annual water savings of 221 acre-feet by providing real-time access to individual water usage data and implementing a tiered rate structure. The project will be the city's first phase of a long-term effort to convert its entire system to AMI.

Bard Water District, Lining of the Mohave Canal Reclamation Funding: \$500,000

Total Project Cost: \$1,076,980

The Bard Water District, located in southern California near the Arizona border, will line a 1/2 mile section of the currently earthen upper Mohave Canal with concrete, benefitting water reliability in the Lower Colorado River System. The project will also allow farmers to continue to work with

the Natural Resources Conservation Service's Environmental Quality Incentives Program to improve irrigation systems.

Belridge Water Storage District, 415 and 500 Canal Reservoir Lining ProjectReclamation Funding: \$500,000Total Project Cost: \$1,356,819

The Belridge Water Storage District, located in Kern County, will line two regulating reservoirs with a high-density polyethylene liner to reduce seepage and improve water reliability. The regulating reservoirs were originally built with asphalt slope protection and clay bottoms, both of which have been degraded. The project is expected to result in annual water savings of 438 acre-feet, which is currently seeping into the region's salty shallow groundwater. Conserved water will be used to reduce the district's demand on water from the State Water Project.

California Water Service, Lawn to Garden Turf Conversion Rebate Program Reclamation Funding: \$235,170 Total Project Cost: \$798,910

The California Water Service (Cal Water) will implement a Lawn to Garden Turf Conversion Rebate Program to promote water conservation through the transformation from high-wateruse landscaping and irrigation to drought tolerant, permeable landscapes through an established rebate program. Cal Water will target the conversion of up to 195,000 square feet of turfgrass to California friendly landscapes in five of its districts. The project is expected to result in annual water savings of 16 acre-feet. Conserved water will be used to meet commercial and residential water demands in Cal Water's Bakersfield, Marysville, Oroville, Selma, and Visalia districts.

Coachella Valley Water District, Rebates for Landscape Irrigation Measures Reclamation Funding: \$1,500,000 Total Project Cost: \$3,047,510

The Coachella Valley Water District, located in southern California, will provide rebates for turf conversion, smart weather-based irrigation control systems installation, and sprinkler nozzle replacement. The rebate program targets the approximately 105 golf courses in the service area that rely on surface water and groundwater. The project is expected to result in annual water savings of 1,637 acre-feet, currently lost to over-irrigation. The conserved water will remain in groundwater storage, alleviating groundwater overdraft.

Desert Water Agency, Automated Metering Infrastructure Installation Project (Phase 2)

Reclamation Funding: \$500,000

The Desert Water Agency, located in southern California, will equip 4,463 manually read residential water meters with encoder receiver transmitters to provide customers with near real-time water usage data, including a leak detection system. The project is expected to result in annual water savings of 561 acre-feet, which will make the area less vulnerable to impacts from drought, aquifer overdraft, and population growth. The conserved water will help protect groundwater resources by reducing the need to pump groundwater during times of reduced

Total Project Cost: \$1,076,769

State Water Project allocations. This is the final phase of the Agency's Automated Metering Infrastructure Installation Project.

East Bay Municipal Utility District, Expanded AMI Deployment for Water and Energy Conservation (Phase 2)

Reclamation Funding: \$5,000,000

The East Bay Municipal Utility District, located in Oakland, will install seven advanced metering infrastructure (AMI) collector network towers and AMI endpoints on approximately 40,000 meters at residential, commercial, and industrial properties. The project will provide customers with real-time water use data and is expected to result in annual water savings of 1,176 acrefeet, currently lost to leaks. Water savings from the project will allow the district to better manage its flows and releases from the Mokelumne River, supporting ecological benefits and enhancing the district's resiliency to drought.

City of Hemet, Cash for Grass Rebate Program Reclamation Funding: \$100,000

The City of Hemet, located in southern California, will implement a rebate program for residential and commercial water users to convert up to 90,000 square feet of turf lawns to drought tolerant landscaping. The project is expected to result in annual water savings of 8 acrefeet, which will reduce the city's need to pump groundwater.

Henry Miller Reclamation District No. 2131, Pick Anderson Modernization Project Total Project Cost: \$2,976,156 Reclamation Funding: \$1,488,078

The Henry Miller Reclamation District No. 2131, located in central California, will modernize the Pick Anderson Pump Station at the north end of the district's surface water conveyance system. The project includes upgrading two existing spill structures with automatic gates and flow meters, constructing a long-crested weir, and installing three new pumps. The project also includes lining 5,560 feet of earthen canals with a geomembrane liner and cement, and three new Supervisory Control and Data Acquisition sites for remote monitoring and automated pumping control. The project is expected to result in annual water savings of 3,162 acre-feet, currently lost to seepage, over-pumping, and operational spills. Conserved water will reduce the need for deep well pumping and allow water to remain in the San Joaquin River.

Long Beach Water Department, Lawn-to-Garden Program Reclamation Funding: \$400,000 Total Project Cost: \$1,200,000

The Long Beach Water Department will continue its Lawn-to-Garden Program by providing rebates to residential, commercial, institutional, and industrial customers to convert 400,000 square feet of turf to sustainable, water efficient landscaping. The project is expected to result in annual water savings of 56 acre-feet. Water conserved through the project will supplement the city's finite water supply from the Central Groundwater Basin and will offset the need to purchase additional water from other sources.

Total Project Cost: \$200,052

Total Project Cost: \$18,908,753

Lower Tule River Irrigation District, Magnetic Smart Meter Installation Reclamation Funding: \$2,000,000 Total Project Cost: \$4,746,283

The Lower Tule River Irrigation District, located in central California, in partnership with the Pixley Irrigation District, will install 742 automated magnetic smart meters at turnouts along 320 miles of open canals throughout the two districts. The project is expected to result in annual water savings of 10,621 acre-feet, which is currently lost to leaks and over-deliveries. Conserved water will remain in the system to avoid reductions in allocations in times of shortage.

McMullin Area Groundwater Sustainability Agency, Precision Metering with Real-**Time Remote Telemetry** Total Project Cost: \$6,885,260 Reclamation Funding: \$2,800,000

The McMullin Area Groundwater Sustainability Agency, located in central California, will install a groundwater well measurement and monitoring array with a telemetrically supported data collection system to improve water management for its agricultural customers. The project includes the installation of electromagnetic flow meters with telemetry at 925 groundwater wells, along with six weather stations located throughout the Agency's service area. The project is expected to result in annual water savings of 20,508 acre-feet as a result of reduced pumping. The Kings Groundwater Sub-basin, part of the San Joaquin Groundwater Basin, is the main source of water for the Agency and the project supports its efforts to reduce groundwater overdraft by an annual average of over 90,000 acre-feet.

Metropolitan Water District of Southern California, Residential and Commercial Turf **Replacement Incentive Program** Reclamation Funding: \$5,000,000

Total Project Cost: \$39,500,000

The Metropolitan Water District of Southern California, located in Los Angeles County, will convert approximately 22.25 million square-feet of non-functional turf to water-efficient landscaping. The project is expected to result in annual water savings of 3,003 acre-feet, reducing demand for imported supplies from the Colorado River, State Water Project, and Central Valley Project systems.

Moulton Niguel Water District, Low Resolution Meter Replacement Project (Phase 2) **Reclamation Funding: \$405,198** Total Project Cost: \$1,012,995

The Moulton Niguel Water District, located in southern California, will replace 2,850 existing meters with low resolution ultrasonic meters that are with advanced metering infrastructure (AMI). The existing meters do not currently detect low flows and are not compatible with the new AMI radio systems. The project is expected to result in annual water savings of 1,735 acrefeet, which is currently lost to leaks. The district is entirely dependent on imported sources for its potable water supply and water savings from the project will help provide a more secure water supply, particularly in times of drought.

Moulton Niguel Water District, Commercial and HOA Landscape Water Use Efficiency Program

Reclamation Funding: \$500,000

The Moulton Niguel Water District will also provide rebates for outdoor water use efficiency improvements through its ongoing rebate programs, including for turfgrass conversions to summer-dry California native and climate-adapted plants, and for irrigation system hardware and technology updates, such as weather-based irrigation controllers and conversion to drip irrigation. The project is expected to result in annual water savings of 109 acre-feet.

Municipal Water District of Orange County, Sustainable Landscapes Program (Phase 2)

Reclamation Funding: \$3,000,000

The Municipal Water District of Orange County will offer rebates to residential and commercial customers to convert from water-intensive outdoor landscaping to California native-friendly landscapes and install high-efficiency irrigation equipment. The program will provide incentives to replace approximately 1.9 million square feet of turf, upgrade approximately 5,360 antiquated irrigation timers to smart irrigation controllers and convert over 700,000 square feet of landscaping from spray to drip irrigation. The project is expected to result in annual water savings of 1,197 acre-feet, which will reduce the district's reliance on imported water.

City of Norwalk, Municipal Water Meter Upgrade Program Reclamation Funding: \$492,952 Total Project Cost: \$1,048,834

The City of Norwalk, located in Los Angeles County, will replace 477 manual-read meters with advanced metering infrastructure meters, meter boxes, lids, service laterals, and endpoint hardware. The project will establish a leak detection system and provide real-time water consumption data to allow customers to better manage their water usage. The project is expected to result in annual water savings of 20 acre-feet.

City Of Oceanside, Turf Replacement Rebate and Biogas Expansion Project Reclamation Funding: \$2,000,000 Total Project Cost: \$6,400,000

The City of Oceanside, located in southern California, will expand an existing turf replacement rebate program by incentivizing the conversion of 250,000 square feet of turf to water efficient landscaping, which is expected to result in annual water savings of 32 acre-feet. In addition, the project includes the expansion of a biogas system at the San Luis Rey Water Reclamation Facility, which will increase the renewable energy capacity by 270 kilowatts.

Olivenhain Municipal Water District, Advanced Metering Infrastructure Water Use Efficiency Program (Phases 9 & 10) **Reclamation Funding: \$500,000** Total Project Cost: \$1,519,883

The Olivenhain Municipal Water District, located in southern California, will continue implementation of an advanced metering infrastructure (AMI) program involving the installation

Total Project Cost: \$4,004,400

Total Project Cost: \$7,627,198

of 4,027-meter transmitting units on existing AMI capable meters. The meters will be integrated with the district's customer engagement portal to provide customers with near real-time water use data, which is expected to result in annual water savings of 297 acre-feet. The district currently purchases 100% of its potable water supply from the San Diego County Water Authority. Water conserved through this project will help the district use its purchased potable water supply more efficiently.

Palmdale Water District, Palmdale Ditch Conversion Reclamation Funding: \$5,000,000

The Palmdale Water District, located in southern California, will convert 7.2 miles of the earthen Palmdale-Littlerock Ditch to a 48-inch reinforced concrete pipe. The project is expected to result in annual water savings of 1,531 acre-feet, which is lost to seepage, evaporation, and spills. Water conserved through the project will stay in Lake Palmdale and reduce reliance on water from California's State Water Project. The project is the final phase in the lining of the entire 8.5mile ditch.

Panoche Water District, Contour Canal Lining Project Total Project Cost: \$3,852,700 Reclamation Funding: \$1,887,823

The Panoche Water District, located in Fresno County, will install a concrete liner on 2.9 miles of the currently unlined Contour Canal and replace four check structures, three road crossings, and 15 turnouts. The existing structures will be replaced with pre-cast concrete structures that can accommodate trash screens necessary for high-efficiency irrigation system upgrades. The project is expected to result in annual water savings of 1,588 acre-feet, currently lost to seepage. Water conserved through the project will allow the district to offset 100% of its pumping needs.

City of Redlands, Citywide Water Meter Replacement Project Reclamation Funding: \$2,722,500 Total Project Cost: \$6,913,994

The City of Redlands, located in southern California, will replace 9,070 meters and retrofit an additional 5,876 inefficient meters to advanced metering infrastructure smart meters. The project includes the final three phases of the overall Citywide Water Meter Replacement Project and is expected to result in annual water savings of 986 acre-feet.

Rubidoux Community Services District, Advanced Metering Infrastructure **Implementation Project** Reclamation Funding: \$1,500,000

The Rubidoux Community Services District, located near Los Angeles, will convert 6,386 manualread meters to advanced metering infrastructure meters. The project includes an online customer portal system and a conservation outreach campaign. The project is expected to result in annual water savings of 601 acre-feet by providing near real-time water usage data to more quickly and efficiently detect and repair leaks. Water conserved through the project will stay in the groundwater basin and assist the district in meeting necessary water use reductions pursuant to its 2020 Water Shortage Contingency Plan.

Total Project Cost: \$22,580,000

Total Project Cost: \$4,340,747

Santa Barbara County Water Agency, Water-Wise Landscape Rebate Program Reclamation Funding: \$436,667 Total Project Cost: \$1,266,667

The Santa Barbara County Water Agency, located in southern California, will partner with seven local water purveyors to administer a regional Water-Wise Landscape Rebate Program to provide funding incentives for increased outdoor water savings. The project will provide rebates for irrigation efficiency retrofits, water wise plants, and turf removal. The project is expected to result in annual water savings of 122 acre-feet, which will help reduce demand for water from California's State Water Project and drawdown of groundwater supplies.

Santa Clarita Valley Water Agency, Water Efficiency Program Reclamation Funding: \$2,000,000 Total Project Cost: \$7,242,900

The Santa Clarita Valley Water Agency, located north of Los Angeles, will implement water efficiency measures at 15 apartment complexes with approximately 2,600 dwelling units through a comprehensive effort that includes rebates for 1,050 smart irrigation controllers, 22,500 overhead high efficiency spray nozzles, and 600,000 square feet of drip irrigation conversion, along with rebates for 9,600 high-efficiency household devices including faucet aerators, showerheads, and toilet flappers. The project also includes rebates to convert approximately 1,350,000 square feet of grass lawns to native drought-tolerant landscaping at both commercial and residential properties, and rebates to install 5,400 high-efficiency toilets. The project is expected to result in annual water savings of 579 acre-feet, which will reduce the Agency's demand on local groundwater sources and imported water.

Sonoma County Water Agency, Sonoma-Marin Drought Resiliency Program Reclamation Funding: \$2,000,000 Total Project Cost: \$4,444,445

The Sonoma County Water Agency, located north of San Francisco, will implement a water conservation rebate program in partnership with 12 regional water utility partners that have joined together to work on regional solutions for water use efficiency. The program includes removing over 1.7 million square feet of turf grass, replacing 650 inefficient washing machines with high-efficiency models, installing 215 home water monitoring devices, replacing 700 high-volume toilets with high efficiency models, and installing 815 smart irrigation controllers. In addition, the City of Santa Rosa will offer a direct-install program to provide 2,500 households with high-efficiency indoor fixtures, including low flow showerheads and faucet aerators. The project is expected to result in annual water savings of 342 acre-feet, which will remain in the Russian River system.

Stockton East Water District, Upper Farmington Flow Measuring FlumeReclamation Funding: \$363,500Total Project Cost: \$727,000

The Stockton East Water District, located near Sacramento, will construct a flow measurement flume at the outlet of the Upper Farmington Canal (Canal) to provide reliable and accurate flow measurements. The district will also pipe 777 feet of the currently earthen Canal between the outlet and the entrance of the flume. The district typically receives an allocation of 75,000 acrefeet from the New Melones Reservoir. However, due to extreme and ongoing drought

conditions, the district did not receive an allocation in 2022. The project is expected to result in annual water savings of 10,865 acre-feet, which is lost to seepage, over-deliveries, and spills. Water conserved will be stored in the New Melones Reservoir to address shortages in drought years.

Tule Hydro LLC, Tule Hydroelectric Rehabilitation ProjectReclamation Funding: \$500,000Total Project Cost: \$2,296,000

Tule Hydro LLC will bring the currently mothballed Tule Hydroelectric Facility, located in Tulare County, back online by updating the intake structure and powerhouse, installing a more efficient control system, and converting the existing 70-kilovolt interconnection to a new 12-kilovolt interconnection to improve grid stability and safety. The project will bring the 6.4-megawatt facility back online and will increase historic generation by 5%.

Turlock Irrigation District, Main Canal Water Efficiency Improvement ProjectReclamation Funding: \$2,000,000Total Project Cost: \$4,516,673

The Turlock Irrigation District, located in the Central Valley, will improve and automate five drop structures on its Main Canal, allowing operators to control water levels remotely instead of through manual adjustments. The district will modify the drop structure, install new automated gates, and install telemetry and communications equipment to allow for Supervisory Control and Data Acquisition integration. The project is expected to result in annual water savings of 2,241 acre-feet by reducing spills and the need for groundwater pumping. The conserved water will remain in the system and be made available to meet shortages during drought years.

Upper San Gabriel Valley Municipal Water District, Water Smart Home Kit Water Use Efficiency Project

Reclamation Funding: \$150,000

The Upper San Gabriel Valley Municipal Water District, located near Los Angeles, will distribute approximately 2,200 Water Smart Water Use Efficiency Home Kits to residential customers for direct installation of water use efficiency fixtures. Each kit will include sprinkler nozzles, sprinkler pressure reducing stations, shower start flow control devices, shower heads, sink faucet aerators, toilet leak detection tablets, toilet flappers, toilet supply lines, couplings, necessary tools for installation, and instructional materials. The project is expected to result in annual water savings of 163 acre-feet, which is currently lost to leaks. The project is an expansion of a previous program and will help the district meet its water use efficiency and conservation goals identified in its 2020 Urban Water Management Plan.

Western Municipal Water District, Western Meter Replacement Project (Phase 3) Reclamation Funding: \$704,988 Total Project Cost: \$1,438,751

The Western Municipal Water District, located in Riverside, California, will install 1,835 advanced metering infrastructure (AMI) meters and two full-bore electromagnetic distribution meters. The project is expected to result in annual water savings of 800 acre-feet, which is currently lost to leaks and over consumption. By completing the project, the district expects to reduce its reliance

Total Project Cost: \$313,090

on groundwater and imports from Metropolitan Water District of Southern California. The project will bring the district's service area to 100% AMI.

Colorado

City of Alamosa, Cattails Golf Course Irrigation Efficiency Project Reclamation Funding: \$500,000 Total Project Cost: \$1,300,000

The City of Alamosa, located in south-central Colorado, will install 10,600 linear feet of highdensity polyethylene pipe to upgrade its irrigation system for the back nine holes of the public Cattails Golf Course. The city will also install a sprinkler system with adjustable nozzles, individual head controls, and weather-related sensors. The project is expected to result in annual water savings of 14 acre-feet, which will remain in the Rio Grande system.

Deutsch Domestic Water Company, Conservation Measures & Renewable Energy Improvements

Reclamation Funding: \$450,000

Total Project Cost: \$900,000

The Deutsch Domestic Water Company, located in western Colorado, will improve its municipal and irrigation water system efficiencies through canal lining, rebates, and automation. The project includes replacing 150 manual-read meters with advanced metering infrastructure technology, implementing a Supervisory Control and Data Acquisition system, and offering rebate programs for turf removal, smart irrigation devices, and the installation of high-efficiency indoor appliances and fixtures. In addition, the project will convert a half-mile section of the earthen Young Ditch to polyvinyl chloride pipe and install solar panels with a combined capacity of 70-kilowatts to power the Company's pumping operations. The project is expected to result in annual water savings of 167 acre-feet, which is lost to leaks and seepage. Conserved water will help maintain water temperatures and levels, allow the Company to utilize its water rights more efficiently, and avoid restrictions during periods of water shortage.

Florida Consolidated Ditch Company, Hess Lateral Improvement ProjectReclamation Funding: \$2,000,000Total Project Cost: \$4,923,067

The Florida Consolidated Ditch Company, located in Durango, will convert 4.5 miles of the open earthen Hess Lateral to a buried pressurized high-density polyethylene pipeline. The project also includes construction of 24 irrigation turnouts, a reinforced concrete turnout structure, a reinforced concrete pipeline intake structure, and an intake pond. The project is expected to result in annual water savings of 206 acre-feet, currently lost to seepage and evaporation. Conserved water can be stored in Lemon Reservoir and can be used for beneficial uses, including supplemental in-stream flows (in 2020 and 2021, the Company donated over 500 acrefeet of water to the Florida River for aquatic and riparian benefits) and helping to avoid reduced water allocations during times of shortage. By improving delivery pressure, the project will also facilitate current and future on-farm improvement projects, including conversion to sprinkler irrigation systems.

City of Fountain, Water Meter Upgrade Project **Reclamation Funding: \$401,554**

The City of Fountain, located near Colorado Springs, will upgrade 1,406 existing meters to advanced metering infrastructure smart meters and will install seven data collectors to gather and send real-time water meter consumption data. The project is expected to result in annual water savings of 36 acre-feet, which will remain in the Pueblo Reservoir and help improve water reliability in the Arkansas River Basin.

Montezuma Valley Irrigation Company, Lower Arickaree and Garrett Ridge Canal **Piping Project** Reclamation Funding: \$3,000,000

The Montezuma Valley Irrigation Company, located in southwest Colorado, will convert 7,100 feet of the earthen Garrett Ridge Canal and 9,500 feet of the Lower Arickaree Canal to 36-inch high-density polyethylene pipe. The Garrett Ridge Canal improvements also include a pressure reducing structure at the end of the main pipeline, air vacuum valves, a flow meter, and a spill pipeline to convey excess flows back to the Upper Hermana Lateral. The Lower Arickaree Canal improvements include vacuum valves, a flow meter, and a drain and cap which will eliminate the need for operational water in the Canal. In addition, the Company will install a 19-kilowatt solar array on the roof of the Company's maintenance building to offset 100% of the annual electricity needs at the building. The project is expected to result in annual water savings of 2,253 acre-feet, which is lost to seepage, evaporation, and operational losses. The conserved water will be stored in the Narraquinnep and McPhee Reservoirs and within the Dolores River system, benefitting native fish species, enabling water to be piped to the Ute Mountain Tribe, and being available to meet allocations in times of shortages.

Idaho

Big Wood Canal Company, North Shoshone Pipe Dream 4A **Reclamation Funding: \$176,538** Total Project Cost: \$449,536

The Big Wood Canal Company, located near Twin Falls, in partnership with the American Falls Reservoir District #2, will convert 8,838 feet of earthen canal to polyvinyl chloride pipe. The project will allow the Company to deliver pressurized irrigation water within the Wood River Basin and is expected to result in annual water savings of 813 acre-feet. Conserved water will be stored in the Magic Reservoir, allowing for an extended delivery season while also keeping flows higher and colder in the Big Wood River to benefit fish habitat.

Big Wood Canal Company, Rye Grass Hydroelectric Project Reclamation Funding: \$4,554,961 Total Project Cost: \$9,109,923

The Big Wood Canal Company will also implement the Rye Grass Hydroelectric Project to divert irrigation water from the Big Wood River to the Richfield Canal and then return the water to the river through a new 5,950-foot long, 5.8-foot diameter steel pipeline. The project also includes construction of a new 1,600-kilowatt hydroelectric facility at the end of the pipeline. Power

Total Project Cost: \$892,342

Total Project Cost: \$6,004,000

generated from the project will be sold to Idaho Power Company. The location of the project is along a reach of the Big Wood River with high transmission losses. As a result of avoiding that stretch, the project is expected to result in annual water savings of 7,620 acre-feet, which will be stored in the Magic Reservoir for longer periods of time.

Boise Project Board of Control, New York Canal Lining (Phase 10) Reclamation Funding: \$3,665,000 Total Project Cost: \$7,330,000

The Boise Project Board of Control, located in Boise, will replace 5,230 feet of existing concrete and asphalt lining along the New York Canal with a multi-layer geocomposite liner with a concrete cap. Water supply has not been sufficient to meet demands, and in recent years, users within the Board's service area have had to purchase additional river water to help augment their irrigation water supply. The project is expected to result in annual water savings of 4,047 acre-feet, which is currently lost to leaks and seepage. As a result of the project, the Board will be able to reduce reliance on purchased water from other sources and increase the amount of water available in Arrowrock and Anderson Ranch Reservoirs to benefit fish and recreation.

Falls Irrigation District, Pump Station SCADA and Automation Upgrade ProjectReclamation Funding: \$3,719,393Total Project Cost: \$7,438,786

The Falls Irrigation District, located in American Falls, will automate a 3,700-horsepower pump station by adding an industrial control panel; variable speed motors, pumps and drives; flowmeters; and a Supervisory Control and Data Acquisition system. Currently, the pump station runs at a constant speed, resulting in over-pumping and conveyance spills. The project is expected to result in annual water savings of 1,684 acre-feet by enabling the district to match supply and demand. Conserved water will be stored in the American Falls Reservoir, helping to maintain higher water levels and colder temperatures, and will offset the need to pump groundwater.

Nampa & Meridian Irrigation District, Ridenbaugh Canal Diversion ModernizationReclamation Funding: \$4,722,000Total Project Cost: \$9,637,000

The Nampa & Meridian Irrigation District, located near Boise, will modernize the Ridenbaugh Canal diversion by replacing the existing check boards with pneumatic bladder dams; replacing the 550-foot sediment control structure and catwalk; replacing the weed rack; and installing electrical, pneumatic, and mechanical systems to operate the automated diversion. Currently, the diversion structure requires manual placement and removal of 20-foot-long wooden boards, which is slow, imprecise, and dangerous. By modernizing the diversion structure, the district will be able to deliver water more precisely to users, resulting in reduced operational losses and seepage losses, which is expected to result in annual water savings of 600 acre-feet. Conserved water will remain in the Boise River for downstream irrigation uses and fish and wildlife benefits.

North Side Canal Company, Water Conservation and Delivery Efficiency Improvements by Adding SCADA Sites Reclamation Funding: \$266,817 Total Project Cost: \$544,526

The North Side Canal Company, located in southern Idaho, will add 33 Supervisory Control and Data Acquisition (SCADA) sites throughout its canal system to its current network of 66 sites. Of the 33 proposed SCADA sites, 15 will be for automated gate control and 18 will be for flow monitoring. The project is expected to result in annual water savings of 30,856 acre-feet, which is currently lost to spills. Conserved water will remain in the Upper Snake River system in the Company's storage account, which will help maintain water levels and temperatures in the river and can be used to minimize reduced water allocations during times of shortage.

Twin Falls Canal Company, Highline Canal Liner Project (Phase 2)Reclamation Funding: \$401,060Total Project Cost \$818,490

The Twin Falls Canal Company, located in southern Idaho, will line 4,500 linear feet of the earthen Highline Canal with a geomembrane liner. The Twin Falls area has experienced consistent water shortages, resulting in conflict over water rights and the inability to meet existing water needs. The project is expected to result in annual water savings of 6,800 acre-feet that is currently lost to seepage, which will improve system reliability and help to avoid further reductions to allocations during dry years.

Montana

East Bench Irrigation District, Carter Creek Lining & Headgate Automation ProjectReclamation Funding: \$188,296Total Project Cost: \$376,592

The East Bench Irrigation District, located in southwest Montana, will automate the Carter Creek and Wilson check structures and install a new Supervisory Control and Data Acquisition system at each site. The improvements will allow the district to remotely monitor upstream flows and water levels in the canal, and remotely control the gates. The project is expected to result in annual water savings of 1,930 acre-feet, currently lost to operational losses and seepage. Conserved water will be used to help avoid reduced water allocations during times of shortage and will otherwise remain in the Beaverhead River and Clark Canyon Reservoir to enhance water levels, water temperatures, and water quality.

Greenfields Irrigation District, Hydropower Development Project Reclamation Funding: \$4,300,000 Total Project Cost: \$9,247,427

The Greenfields Irrigation District, located in Teton County, will replace three existing drop structures: the concrete Pishkun Inlet Drop structure will be replaced with an 11-foot diameter steel penstock; the concrete Johnson Drop structure will be replaced with a 6.5-foot diameter steel penstock; and the concrete A-Drop will be replaced with an 11-foot diameter steel penstock. The project also includes installation of a vertical Kaplan hydropower turbine with a planned energy capacity of 3,000-kilowatts at the Pishkun Inlet Drop and an 800-kilowatt capacity vertical Kaplan turbine at the Johnson Drop. The A-Drop will be designed to account for

the installation of future hydropower. The project is expected to result in annual water savings of 6,655 acre-feet, which is currently lost to seepage. Water saved as a result of the project will allow the district to divert less water from Sun River at times when the river reaches critically low levels, thereby improving instream flows for fish populations and recreation. A diverse group of stakeholders supports the project, including Trout Unlimited, recreational groups, and local landowners.

Lower Yellowstone Irrigation Project, Thomas Point Pumping Plant Replacement Project

Reclamation Funding: \$203,505

Total Project Cost: \$407,010

The Lower Yellowstone Irrigation Project, located in eastern Montana, in partnership with the Lower Yellowstone Irrigation District #1, will replace the existing 200-horsepower pump at the Thomas Point Pumping Plant with a new primary pump (with a variable frequency drive), motor, switchgear, and a Remote Monitoring and Control system to allow for remote monitoring and control of the new pump. The project is expected to result in annual water savings of 4,800 acrefeet, currently lost to over-deliveries and spills from the manual operation of the existing pumping plant. Conserved water will help to meet peak irrigation demand and to avoid water rationing during times of drought and will otherwise be left in the Yellowstone River. More efficient control will also reduce the amount of higher temperature, lower quality water that is discharged back to the Yellowstone River.

Lower Yellowstone Irrigation Project, Critical Structures Replacement Project Reclamation Funding: \$124,999 Total Project Cost: \$249,999

The Lower Yellowstone Irrigation Project will also replace two concrete headgates, the Lateral K and Lateral PP, with new concrete structures, new gates, and a remote monitoring system. A weir with a stilling well will be installed on each headgate structure, and the stilling well will be equipped with Supervisory Control and Data Acquisition components to allow for remote monitoring. The project is expected to result in annual water savings of 1,560 acre-feet, currently lost to leaks and inefficiencies associated with the manual operation of the existing headgates. Conserved water will help to meet peak irrigation demand and to avoid water rationing during times of drought and will otherwise be left in the Yellowstone River.

Pondera County Canal and Reservoir Company, C-Canal Headworks Automation Project

Reclamation Funding: \$243,408

The Pondera County Canal and Reservoir Company, located in northern Montana, will install a Supervisory Control and Data Acquisition system and flow measurement weirs at the two C-Canal Headworks locations at Kunkle Drop and the North Dike of Lake Frances. The Company will also automate the three gates at the Storage Headworks at the North Dike. Automating the system will allow the Company to remotely monitor flows into and out of the Kunkle Drop and the North Dike and to remotely control flow diversions at the North Dike location into the C-Canal. The project is expected to result in annual water savings of 6,142 acre-feet, which is

Total Project Cost \$496,751

currently lost to excess releases and spills. Conserved water will be stored in Birch Creek Reservoir and Lake Frances to increase late season storage and to provide higher reservoir levels in an area that provides critical habitat for fish and wildlife.

Nebraska

Middle Republican Natural Resources District, Remote Irrigation Meter and Irrigation Water Conservation Project (Phase 3) Reclamation Funding: \$1,100,000

The Middle Republican Natural Resources District, located in southern Nebraska, will install near real-time telemetry equipment on 691 irrigation flow meters for improved on-farm water management and reporting. The project is expected to result in annual water savings of 2,610 acre-feet, which is currently lost to overwatering. Conserved water will remain in the local aguifer to maintain groundwater levels for future irrigation events as well as improve discharge for baseflow in the Republican River, which has been designated by the Nebraska Department of Natural Resources as over-appropriated for water resources.

Upper Republican Natural Resources District, High Plains Aquifer Preservation and Irrigation Scheduling Project Reclamation Funding: \$834,310

The Upper Republican Natural Resources District, located in southwestern Nebraska, will install 2,000 digital meter heads and transceivers at irrigation wells to transmit water usage information and crop evapotranspiration rates via a radio network. The real-time usage data will correlate with the district's water-use allocations, allowing irrigators to manage water use relative to their allocation. The project is expected to reduce irrigation water use in the area by over 9%, which is the equivalent of 24,310 acre-feet annually. Conserved water will remain in the aquifer and help the State of Nebraska maintain compliance with the Republican River Compact and associated settlement agreement which allocates Republican River water use between Nebraska, Kansas, and Colorado.

Nevada

Southern Nevada Water Authority, Athletic Field Turf Conversion Incentive Project Reclamation Funding: \$2,000,000 Total Project Cost: \$4,989,072

The Southern Nevada Water Authority, located in Las Vegas, will provide financial incentives to convert over 1.5 million square feet of natural grass to artificial turf on 22 fields at 11 high schools within the Clark County School District. The project is expected to result in annual water savings of 337 acre-feet, which will allow the SNWA to contribute additional unused Colorado River water toward interstate banking efforts.

Total Project Cost: \$2,085,775

Total Project Cost: \$2,683,325

Truckee-Carson Irrigation District, 26 Foot Drop Power Plant Turbine Runner UpgradeReclamation Funding: \$129,941Total Project Cost: \$259,882

The Truckee-Carson Irrigation District, located east of Reno, will upgrade two turbine runners at the 26 Foot Drop Power Plant from fixed blade cast steel turbine runners to adjustable blade Kaplan style stainless steel runners with mechanical shafts. The upgrade will allow the plant to start producing power at a flow of 80 cubic feet per second instead of the current 150 cubic feet per second. The project will increase the existing capacity of the plant from 1,000 kilowatts to 1,100 kilowatts. The increased production will generate additional Renewable Energy Credits that will help the State of Nevada meet its Renewable Energy Portfolio Standard.

New Mexico

Carlsbad Irrigation District, Main Canal Automation Reclamation Funding: \$1,300,000

Total Project Cost: \$2,600,082

The Carlsbad Irrigation District, located in southeastern New Mexico, will install 58 automated gates along its Main Canal and implement a Supervisory Control and Data Acquisition system. The automated gates will ensure consistent water deliveries and increase metering accuracy. The project is expected to result in annual water savings of 2,245 acre-feet, currently lost to spills. Conserved water will remain within the Carlsbad Project along the Pecos River. The project will allow the district to seasonally reduce its total number of diversions and minimize the need to pump supplemental groundwater.

Oklahoma

Lugert-Altus Irrigation District, Ozark Canal Conversion Project (Phase I)Reclamation Funding: \$5,000,000Total Project Cost: \$19,901,321

The Lugert-Altus Irrigation District, located in southwestern Oklahoma, will convert four miles of the earthen open Ozark Canal to a buried 65-inch high-density polyethylene pipeline. The project is expected to result in annual water savings of 1,130 acre-feet, currently lost to seepage, evaporation, and operational inefficiencies. Conserved water will remain in the Lugert-Altus Reservoir, benefitting fish and wildlife, and can be made available to avoid reduced allocations during drought conditions.

City of McAlester, Automatic Metering Infrastructure Project Reclamation Funding: \$500,000 Total Project Cost: \$1,000,000

The City of McAlester, located within the boundaries of the Choctaw Nation in southeastern Oklahoma, will replace 1,797 outdated mechanical meters with Automatic Metering Infrastructure (AMI) meters on residential and commercial lines. AMI meters currently make up 59% of water meters in the city, and the project will increase that amount to 83%. The project is expected to result in annual water savings of 143 acre-feet, which will remain in Lake McAlester to benefit customers, local wildlife, and recreation.

Oregon

Deschutes River Conservancy, Conserving Water Through Piping and Improved **Monitoring and Measurement** Reclamation Funding: \$2,693,355

Total Project Cost: \$5,388,811

The Deschutes River Conservancy, in partnership with the Central Oregon Irrigation District, the North Unit Irrigation District, and the Arnold Irrigation District, will convert over six miles of earthen canal to high-density polyethylene and polyvinyl chloride pipe, which includes 12,541feet of the G Lateral, 15,368-feet of the G-2 sub-lateral, and 3,830-feet of the Lundy Ditch. The project also includes installation of Supervisory Control and Data Acquisition systems at 10 locations along the Pilot Butte Canal. The project is expected to result in annual water savings of 1,548 acre-feet, which is currently lost to seepage and will result in reduced diversions. Conserved water can either be stored in the Wickiup Reservoir in the winter for release during critical times for endangered species, including the Oregon spotted frog, or can be left instream in the Deschutes River in the summer to provide increased flows and cooler temperatures for sensitive fish species.

Malheur Watershed Council, Piping Lateral Canals in the Vale Bench Reclamation Funding: \$2,520,000 Total Project Cost: \$5,179,141

The Malheur Watershed Council, in partnership with the Vale Oregon Irrigation District, located in eastern Oregon, will convert 10.4 miles of open-earthen lateral canals to plastic irrigation pipe. The district's irrigation season has ended early for 10 of the past 17 years and the pipeline conversion will allow the district to better meet its water demands. The project is expected to result in annual water savings of 4,888 acre-feet, which is currently lost to seepage. Conserved water will help achieve a carryover pool in Beulah Reservoir to benefit the federally listed Bull Trout.

Tualatin Valley Water District, Advanced Metering Infrastructure Project Total Project Cost: \$21,549,340 Reclamation Funding: \$5,000,000

The Tualatin Valley Water District, located near Portland, will automate 100% of the water meters in its service area, including replacing 26,074 outdated meters with new smart meters and retrofitting 34,423 meters with automated digital registers. New endpoints will be installed at all 60,497 meters. The project is expected to result in annual water savings of 873 acre-feet, which will reduce the district's need to pump and import water from the Portland Water Bureau, where water originates from the Bull Run Watershed and the Columbia South Shore Wellfield.

South Dakota

Belle Fourche Irrigation District, Meade Lateral Pipeline ProjectReclamation Funding: \$225,842Total Project Cost: \$451,987

The Belle Fourche Irrigation District, located in northwestern South Dakota, will convert approximately 4,200 feet of open earthen ditch to polyvinyl chloride pipe and install elbows, air vents, and farmer turnouts on the Mead Lateral. The project is expected to result in annual water savings of 490 acre-feet, which is currently lost to seepage. Conserved water will be stored in the Belle Fourche Reservoir and be made available to meet demands in times of shortages.

Texas

City of Arlington, Smart Metering and Customer Conservation Project Reclamation Funding: \$2,000,000 Total Project Cost: \$5,838,159

The City of Arlington will convert 17,678 existing meters to advanced metering infrastructure smart meters and implement customer portal system upgrades. The project will improve meter accuracy and provide customers with reliable and real-time access to water use data. The project is expected to result in annual water savings of 5,530 acre-feet. Conserved water will reduce the city's need to purchase water from the Tarrant Regional Water District, which stores water throughout the Trinity River basin and serves the Dallas-Fort Worth metropolitan area.

Brownsville Public Utilities Board, Advanced Metering Infrastructure Project Reclamation Funding: \$5,000,000 Total Project Cost: \$18,059,207

The Brownsville Public Utilities Board, located on the western Gulf Coast of Texas, will replace approximately 17,678 manual read meters with advanced metering infrastructure (AMI) smart meters. The Board will also retrofit approximately 39,773 exiting meters with an AMI compatible register and endpoint. The project is expected to result in annual water savings of 2,103 acrefeet, which is currently lost to leaks. Conserved water will remain in the Rio Grande Basin.

Donna Irrigation District, Lateral 22 and South Crossover Piping Project Reclamation Funding: \$3,300,000 Total Project Cost: \$6,600,000

The Donna Irrigation District, located in southern Texas, will convert 5,200 feet of the currently concrete lined South Crossover Lateral to a 60-inch polyvinyl chloride pipeline and 3,800 feet of the currently concrete lined Lateral 22 to a 48-inch polyvinyl chloride pipeline. The project is expected to result in annual water savings of 1,790 acre-feet by reducing seepage, evapotranspiration, and overflow losses. The district will also install 2 backup solar-electric battery systems at the district's First Lift Pump Station and Second Lift Pump Station to provide power in the event of a power outage, as well as two solar-powered monitoring stations to provide a more efficient, real-time, detection of problems to aid in minimizing water loss. The conserved water will remain in the Falcon and Amistad Reservoirs for eventual allocation to

other users in the Rio Grande System, alleviating pressure on the over-allocated water resource shared with Mexico.

El Paso County Water Improvement District No. 1, Riverside Canal Concrete Lining Project (Phase VI)

Reclamation Funding: \$2,000,000

Total Project Cost: \$4,031,430

The El Paso County Water Improvement District No. 1 will line 11,000 feet of the currently earthen Riverside Canal with steel-panel reinforced concrete. The project is expected to result in annual water savings of 1,637 acre-feet currently lost to seepage, which will enable the district to better manage its allocation of Rio Grande Project Water. El Paso County has experienced prolonged and extreme drought conditions, and the County population is projected to double to over 1.5 million people by 2070. As a result of the project, additional Rio Grande Project water will be stored in Elephant Butte and Caballo Reservoirs, which will provide critical water supplies to the area during drought years.

El Paso Water Utilities Public Service Board, Installing Smart Meters in El PasoReclamation Funding: \$5,000,000Total Project Cost: \$13,890,000

The El Paso Water Utilities Public Service Board will replace 60,000 existing manual read meters with advanced metering infrastructure smart meters for residential and business customers, and implement a customer portal for real-time tracking. In recent years, the Board has received only about 20 percent of its annual water allocation from the Rio Grande Project as a result of ongoing drought conditions. The project is expected to result in annual water savings of 1,285 acre-feet, which will remain in the Rio Grande Project and reduce groundwater pumping from the Hueco Bolson aquifer.

Hidalgo County Irrigation District No. 1, Main Canal Lining ProjectReclamation Funding: \$2,561,545Total Project Cost: \$5,123,090

The Hidalgo County Irrigation District No. 1, located in southern Texas, will line 3,900 feet of the earthen Main Canal with a geosynthetic composite liner and 4-inches of fiber reinforced concrete. The project also includes the installation of new Rubicon gates and an automated solar-powered Supervisory Control and Data Acquisition system. The project is expected to result in annual water savings of 5,089 acre-feet, currently lost to seepage and evaporation. The conserved water will remain in the Falcon and Amistad Reservoirs for eventual allocation to other users in the Rio Grande System, alleviating pressure on the over-allocated water resource shared with Mexico.

La Feria Irrigation District Cameron County No. 3, Telemetry to Conserve Water in the Lower Rio Grande Valley

Reclamation Funding: \$106,454

Total Project Cost: \$212,908

The La Feria Irrigation District Cameron County No. 3, located in the Lower Rio Grande Valley of South Texas, will install a solar powered Supervisory Control and Data Acquisition telemetry system at 10 spillway sites to monitor water flow, manage discharges, and reduce water currently lost to operational spills. The 10 sites are currently manually managed by the district, resulting in an inefficient operation of the system. The project will allow for water to be stored in Falcon and Amistad Reservoirs for longer periods of time, helping to support appropriate water levels.

Red River Authority of Texas, Advanced Metering Infrastructure Program Reclamation Funding: \$450,000 Total Project Cost: \$927,150

The Red River Authority of Texas, located in northern Texas, will replace 2,650 existing manual read meters with new advanced metering infrastructure smart meters with additional ancillary radio and computer reading equipment for residential and commercial customers. The new meters will provide real-time water consumption data to the Authority and its customers, which can identify leaks in hours, instead of the current 60 days. The project is expected to result in annual water savings of 105 acre-feet, which will help offset groundwater use in the Red River Basin.

Utah

CO-OP Farm Irrigation Company, Piping and Pressurization Project Reclamation Funding: \$1,123,442 Total Project Cost: \$2,342,585

The CO-OP Farm Irrigation Company, located north of Salt Lake City, will convert 20,800 feet of existing earthen ditch and concrete lined sections of the CO-OP Ditch, the Silver Summit Lateral, and the South Bench Ditch to high-density polyethylene pipe. The piped system will connect to the existing river diversion and will include a system meter, individual metered turnouts for every user, and a 15-horsepower pump for the Silver Summit Lateral. The Company will also install a 11.8-kilowatt solar array to use within their system to offset energy consumption. The project is expected to result in annual water savings of 469 acre-feet, which is currently lost to seepage. Conserved water will be used to avoid reduced allocations in times of shortage or otherwise will remain in the South Fork of the Ogden River and Causey Reservoir, benefiting instream flows, water quality, and water temperature.

Davis & Weber Counties Canal Company, Canal Enclosure and Solar Energy Project Reclamation Funding: \$1,800,000 Total Project Cost: \$4,500,000

The Davis & Weber Counties Canal Company, located near Salt Lake City, will enclose 1,995 feet of open lined canal within the main delivery canal with an 8-foot by 7-foot and 8-foot by 6-foot gasketed precast concrete box culvert. The project also includes installation of a 20.1-kilowatt solar array at the Company's maintenance building and shop at Sunset Reservoir for on-site power. The project is expected to result in annual water savings of 1,116 acre-feet, which is currently lost to leaks, seepage, root uptake, and evaporation. The project will allow for more water to be saved and held in the Echo and East Canyon Reservoirs, thereby leaving more water in the Weber River system for longer periods and providing benefits to native fish species. The project has support from multiple stakeholders within the Weber River Watershed, including Trout Unlimited and the Weber River Water Users Association.

Duchesne County Water Conservancy District, Monarch & Cedarview Canal **Improvement Project** Reclamation Funding: \$385,000 Total Project Cost: \$770,000

The Duchesne County Water Conservancy District, located in northeastern Utah, in partnership with the Monarch Canal & Reservoir Company, Dry Gulch Irrigation Company, and Moon Lake Water Users Association, will construct a diversion structure on the Uintah River for the Cedarview Canal, with automated gates and flow measurement telemetry, along with construction of an irrigation control structure. The project will also include a diversion structure on Dry Gulch Creek for the Monarch Canal, with six steel flumes, three telemetry sites, and two mag meters for pipelines on the end of the system. The joint project will allow for improved water management within the district's service region. The project is expected to result in annual water savings of 1,585 acre-feet, currently lost to operational inefficiencies, which will remain in the Uinta River and Dry Gulch Creek.

King Irrigation Company, Full System Pressurization Project Reclamation Funding: \$1,000,000

The King Irrigation Company, located in northern Utah near the Idaho border, in partnership with the Reese & Clark Irrigation Company, will convert 3 miles of canals to a pressurized polyvinyl chloride pipeline. The project will also install a telemetry system to provide pressurized water for the entire system and replace four inefficient pump stations with one pump station equipped with variable frequency pumps and drives. The project is expected to result in annual water savings of 171 acre-feet, currently lost to seepage, evaporation, and operational spills. The increased efficiency of the piped system will reduce the amount of water diverted from the Bear River, allowing more water to remain in the system for longer amounts of time, benefitting water temperatures and water levels.

Last Chance Canal Company, SCADA Project (Phase II) **Reclamation Funding: \$311,040**

The Last Chance Canal Company, located in southeastern Idaho, will implement a modernized Supervisory Control and Data Acquisition (SCADA) system, including installation of 11 SCADA sites with telemetry, flumes, and automated gates, and a software program to manage the system and provide real-time remote data. The installation of the new SCADA system will reduce spills at the end of the main canals and over-deliveries, which is expected to result in annual water savings of 2,270 acre-feet. By reducing over-deliveries and spills, the project will allow the Company to reduce its diversions, allowing for the conserved water to remain in the Bear River.

Total Project Cost: \$2,270,000

Total Project Cost: \$648,000

City of St. George Water Services Department, Advanced Metering Infrastructure Installation Project Reclamation Funding: \$3,000,000 Total Project Cost: \$9,382,673

The City of St. George Water Services Department, located in southwestern Utah, will install 32,500 advanced metering infrastructure (AMI) end points on existing water meters to enable real-time evaluation of water use data. The city will also implement a customer portal to allow for real-time water management. The AMI installation project is expected to result in annual water savings of 2,711 acre-feet, which will remain in the Virgin River Drainage Basin.

Washington

East Columbia Basin Irrigation District, Installation of Conservation Pipelines (Blocks 40, 41, 42, 43, 44, 45, 46 & 49)

Reclamation Funding: \$500,000

Total Project Cost: \$1,305,778

The East Columbia Basin Irrigation District, near Othello, will convert 24,483 feet of earthen canals to polyvinyl chloride pipelines to address seepage and evapotranspiration losses. The project is expected to result in annual water savings of 290 acre-feet, which will be used to offset existing groundwater pumping in an area with significant aquifer depletion and to enhance flows in the Columbia River.

Quincy-Columbia Basin Irrigation District, West Canal Concrete Lining ProjectReclamation Funding: \$500,000Total Project Cost: \$1,245,749

The Quincy-Columbia Basin Irrigation District, located in central Washington, will line 2,500 feet of the earthen West Canal with a geomembrane liner covered with concrete to address seepage losses. The project advances the goals of a Memorandum of Understanding (MOU) between the three Columbia Basin Project irrigation districts, the Washington State Department of Ecology, the Washington State Department of Fish and Wildlife, and the Bureau of Reclamation to address regional water reliability concerns including drought, groundwater issues, and improved stream flows to assist salmon recovery. The project is expected to result in annual water savings of 728 acre-feet that is currently lost to seepage. The water conserved will be used to meet actions identified in the MOU, including offsetting groundwater pumping and maintaining flows in the Columbia River.

Quincy-Columbia Basin Irrigation District, W61F Lateral Concrete Lining ProjectReclamation Funding: \$449,967Total Project Cost: \$899,934

The Quincy-Columbia Basin Irrigation District will also line 4,500 feet of the earthen W61F lateral with a geomembrane liner covered in concrete. The project advances the goals of a Memorandum of Understanding (MOU) between the three Columbia Basin Project irrigation districts, the Washington State Department of Ecology, the Washington State Department of Fish and Wildlife, and the Bureau of Reclamation to address regional water reliability concerns including drought, groundwater issues, and improved stream flows to assist salmon recovery. The project is expected to result in annual water savings of 633 acre-feet that is currently lost to

seepage. The water conserved will be used to meet actions identified in the MOU, including offsetting groundwater pumping and maintaining flows in the Columbia River.

Wyoming

Cottonwood Irrigation District, Lateral L-7 Replacement Project Reclamation Funding: \$500,000 Total Project Cost: \$1,891,000

The Cottonwood Irrigation District, located in western Wyoming, will convert 3,543 feet of 30inch welded steel pipe on Lateral L-7, to polyvinyl chloride pipe. The project is expected to result in annual water savings of 2,009 acre-feet, which is currently lost to leaks. The project will help avoid reduced allocations for the district's agricultural users during times of shortage and allow for more water to remain in Cottonwood Creek for longer periods of time, benefiting recreation and fish species.

Highland Hanover Irrigation District, Pump Station Replacement ProjectReclamation Funding: \$2,000,000Total Project Cost: \$5,095,825

The Highland Hanover Irrigation District, located in north-central Wyoming, will replace the four original Bureau of Reclamation pumping units in Pump Station #2 with modern pumps and electrical systems. The project will also install flow meters at each discharge pipe and a water level sensor. The project is expected to result in annual water savings of 4,633 acre-feet, which is currently lost to spills. Conserved water will remain in the Bighorn River system and result in reduced releases for irrigation water from Boysen Reservoir.

Popo Agie Conservation District, Enterprise Conservation Improvement Project Reclamation Funding: \$303,164 Total Project Cost: \$755,540

The Popo Agie Conservation District will partner with the Enterprise Watershed Improvement District to convert 8,820 feet of the earthen Yankee/Calvert Lane Lateral to polyvinyl chloride pipe in north-central Wyoming. The project is a top priority for both districts and is expected to result in annual water savings of 524 acre-feet, which is currently lost to seepage. Conserved water will remain in Frye Lake and be available to meet late season irrigation needs in low snowpack years.