

FY 2019 Small-Scale Water Efficiency Projects

Arizona

Colorado River Indian Tribes, Acoustic Doppler Velocity Meter Gauging Stations **Reclamation Funding: \$75,000** **Total Project Cost: \$185,466**

The Colorado River Indian Tribes, located in western Arizona, will install eight acoustic doppler velocity meter gauging stations on sub-laterals of the Colorado River Irrigation Project, which will allow the Tribal Water Resource Department to obtain reliable, real-time flowrate data that will enable more efficient regulation of water distribution. The project will minimize water losses due to over-delivery and excessive operational spills and improve accounting accuracy of the Tribes' Colorado River water allocation. This project is supported by the Tribes' Agricultural Resource Management Plan Phases I and II, and by the Water Measurement Inventory for the Colorado River Irrigation Project.

Cortaro Water Users Association, Supervisory Control and Data Acquisition, Phase III **Reclamation Funding: \$74,469** **Total Project Cost: \$149,469**

The Cortaro Water Users Association, located in southern Arizona, will install a Supervisory Control and Data Acquisition (SCADA) system on eight groundwater wells. This will allow the Association to start and stop wells remotely and to program wells to turn on and off at a set time. This will improve the Association's ability to time water deliveries and eliminate excess water pumping. The project is supported by a system analysis conducted by the Cortaro-Marana Irrigation District.

Kaibab Band of Paiute Indians Tribe, Water Meter Upgrade Project **Reclamation Funding: \$45,053** **Total Project Cost: \$91,442**

The Kaibab Band of Paiute Indians Tribe, headquartered in northern Arizona, will replace 80 domestic and commercial manual read meters with automatic meter reading (AMR) meters and install 20 additional AMR meters at previously unmetred locations. These new meters will be installed in the Kaibab Paiute Indian Reservation villages of Kaibab, Juniper, Red Hills, and Steamboat. Due to inadequacies in the existing metering system, most water deliveries are unaccounted for. This project will enable the Tribe to detect leaks and identify necessary repairs, increase system efficiency, and provide customers with information on water usage to promote conservation. This project is supported by studies undertaken by the applicant and the National Park Service.

Lake Havasu City, Municipal Water Leak Detection and Water Meter Upgrades **Reclamation Funding: \$75,000** **Total Project Cost: \$208,959**

Lake Havasu City, located in western Arizona, will upgrade its existing water meters to new meters capable of data acquisition via radio transmission. The project will increase the water efficiency of the City's water distribution system, improve leak detection capability, and allow for better management of water supplies. Leak detection and water meter upgrades were identified as priorities in the City's 2015 Water Conservation Plan.

Unit B Irrigation District, Pipeline Upgrade Project

Reclamation Funding: \$75,000

Total Project Cost: \$151,500

The Unit B Irrigation District, located in southwestern Arizona, will replace 1,200 linear feet of two smaller concrete pipes with one new polyvinyl chloride pipe. This will allow the District to make faster and more consistent deliveries, avoiding periodic service interruptions so that landowners can schedule deliveries more effectively. This project was identified in the District's 2017 Water Conservation Plan.

California

Bard Water District, Conveyance Improvement: Acoma Lateral Concrete Lining Project I

Reclamation Funding: \$75,000

Total Project Cost: \$182,927

The Bard Water District, located in California near the California-Arizona border, will line 2,125 feet of the earthen Acoma Lateral with concrete. This phase will culminate in the lining of the southeastern portion of the lateral. The project, which is a collaboration with the Quechan Indian Tribe, will conserve water and help to avoid reductions during times of drought. This project is supported by the District's Water Conservation 5-year Plan.

Bard Water District, Conveyance Improvement: Acoma Lateral Concrete Lining Project II

Reclamation Funding: \$75,000

Total Project Cost: \$182,927

The Bard Water District will also line the 2,125 feet of the northwest portion of the earthen Acoma Lateral with concrete. The project, which is a collaboration with the Quechan Indian Tribe, will conserve water and help to avoid reductions during times of drought. This project is supported by the District's Water Conservation 5-year Plan.

Central California Irrigation District, Pipeline Upgrade Project

Reclamation Funding: \$75,000

Total Project Cost: \$199,000

The Central California Irrigation District, located in California's San Joaquin Valley, will replace 800 linear feet of unreinforced cast-in-place concrete pipe with new rubber gasket reinforced concrete pipe. This will reduce water loss due to seepage, thereby reducing overall irrigation demand. This project is supported by the District's 2012 Water Conservation Plan.

City of Big Bear Lake Department of Water and Power, Water System Facilities Automation Project, Phase III

Reclamation Funding: \$75,000

Total Project Cost: \$156,185

The City of Big Bear Lake's Department of Water and Power, located in the mountains west of Los Angeles, will modernize its existing infrastructure by installing new variable frequency drive units and telemetry components on three pumping plant controls, and by installing a Supervisory Control and Data Acquisition (SCADA) system. This project will improve the City's water management capabilities. This project is prioritized in the City's 2016 Water Conservation Management Plan, which was funded through Reclamation's Water Conservation Field Service Program, and the City's Capital Improvement Plan.

City of Hesperia, Water Service Relocation Program, Phase I

Reclamation Funding: \$75,000

Total Project Cost: \$200,000

The City of Hesperia, located in southern California, will remove 5.4 miles of steel water lines from service by connecting residential water services to new, already installed, polyvinyl chloride pipelines. The project will reduce water losses from existing pipes and improve water quality. This project is a high priority in the City's 2008 Water Master Plan.

City of Pasadena Water and Power Department, Spray-to-Drip Residential Irrigation Improvement Program

Reclamation Funding: \$75,000

Total Project Cost: \$150,015

The City of Pasadena's Water and Power Department, just west of Los Angeles, will convert residential landscape irrigation systems from spray systems to more efficient drip irrigation systems for 600 residential customers. This project will reduce water use for residential irrigation and reduce runoff. This project is prioritized in the City's 2015 Urban Water Management Plan and 2011 Water Integrated Resources Plan.

Helendale Community Services District, Advanced Metering Infrastructure Smart Meter Installation Program, Phase II

Reclamation Funding: \$75,000

Total Project Cost: \$198,243

The Helendale Community Services District, located in southern California, will replace its existing water metering system with new smart meters and advanced metering infrastructure radios. This is the second phase of a project to modernize equipment in the District's service area. The improved water use data will help the District with future water planning efforts, decrease water losses, and improve the overall reliability of the water supply. This project will help bring the District into compliance with its Conservation Ordinance, which calls for a 25% water use reduction compared to 2013 usage and is supported by the District's Capital Improvement Plan.

Imperial Irrigation District, Flow Measurement Equipment

Reclamation Funding: \$62,175

Total Project Cost: \$125,175

The Imperial Irrigation District, located in southern California, will purchase new irrigation flow measurement equipment to upgrade outdated equipment. This new equipment will work with the District's current metering program to provide flow verification, leading to more efficient water management. The project is supported by the District's 2016 Water Conservation Plan, as well as the 2012 Imperial Integrated Regional Water Management Plan.

Lower Tule River Irrigation District, Recharge Basin Metering System

Reclamation Funding: \$75,000

Total Project Cost: \$175,975

The Lower Tule River Irrigation District, located in central California, will install 25 Area-Velocity Flow Meters equipped with digital encoders and radio transmitters. This will allow the District to more closely and efficiently monitor flows into groundwater recharge basins. This project is a stated priority in the District's Groundwater Sustainability Plan and the District's Water Management Plan.

Palmdale Water District, Landscape Water Use Efficiency Project, Phase II
Reclamation Funding: \$75,000 **Total Project Cost: \$150,000**

The Palmdale Water District, located in southern California, will provide incentives for residential customers to replace approximately 92,000 square feet of turf with water-efficient landscaping. The project will increase water use efficiency in an area with limited supplies. This project is supported by the District's 2016 Water Master Plan and Wastewater Policy.

Rancho California Water District, Production Meter Upgrade Project
Reclamation Funding: \$75,000 **Total Project Cost: \$165,479**

The Rancho California Water District, headquartered in Temecula in southern California, will install 16 new electromagnetic water meters to replace existing propeller-driven meters. These meters will improve the District's leak detection ability, which will reduce water losses. This project is supported by the District's Urban Water Management Plan, Strategic Business Plan, and a previously conducted water audit.

Reclamation District 787, Meter and SCADA System Expansion Project
Reclamation Funding: \$29,399 **Total Project Cost: \$58,798**

The Reclamation District 787, located in central California, will install water meters on two Sacramento River pumps and will expand its existing Supervisory Control and Data Acquisition (SCADA) system. This project will enable the District to more accurately monitor water usage onsite and remotely, as well as deliver water more efficiently. Water monitoring is a major goal of the District's 2012 Groundwater Management Plan.

South Tahoe Public Utility District, Pressure Reducing Valve SCADA Improvements Project
Reclamation Funding: \$75,000 **Total Project Cost: \$248,788**

The South Tahoe Public Utility District, located in the City of South Lake Tahoe, California, will upgrade its water delivery system by installing a pressure reducing valve (PRV) station to collect flow and pressure data. This project will operate in conjunction with all PRV stations in the District's system to address water delivery deficiencies and improve system reliability for current and future water demand. The project addresses high-priority needs identified in the District's 2016 Water System Optimization Plan and in a technical memorandum prepared by the District's Supervisory Control and Data Acquisition (SCADA) Steering Committee and SCADA Executive Committee.

Tuolumne Utilities District, Raw Water Flow Measurement Project
Reclamation Funding: \$75,000 **Total Project Cost: \$184,306**

The Tuolumne Utilities District, located in central California, will purchase and install flow meters and gate valves on 150 currently unmetered raw water turnouts from their open ditch system. The project will provide improved water usage data, which will enable the District to better manage water supplies. Raw water meter installation was identified as a priority in multiple District planning documents and the District's 2012 Operations Maintenance Strategy.

Colorado

Bostwick Park Water Conservancy District, Automatic Control Gate for Fish Creek and Cimarron Canal Sluice Way

Reclamation Funding: \$71,000

Total Project Cost: \$145,790

The Bostwick Park Water Conservancy District, located in western Colorado, will install an automated water control structure to improve the operation of water releases from Fish Creek reservoir into the Cimarron Canal, and to manage flood or excess flows from the Fish Creek watershed. This will improve the District's overall water supply reliability and flood control capability and will aid with releases for instream flows in the Cimarron River. This project is supported by the District's Water Management Plan.

Central Colorado Water Conservancy District, Northeast Colorado Augmentation SCADA Efficiency Project

Reclamation Funding: \$75,000

Total Project Cost: \$186,960

The Central Colorado Water Conservancy District, located in northeastern Colorado in Weld, Morgan, and Adams counties, will implement Supervisory Control and Data Acquisition (SCADA) on 120 irrigation wells. This will increase water use efficiency, provide the District with real time water use data, and help avoid and resolve future conflicts over water rights. This project is supported by strategies previously established by the District.

City of Fort Collins, Xeriscape Incentive Program Expansion

Reclamation Funding: \$75,000

Total Project Cost: \$226,646

The City of Fort Collins, in northern Colorado, will expand their Xeriscape Incentive Program to commercial and homeowner association landscapes. This project will help the City reduce overall water demand through conversions to low water use landscaping and hardscaping. This project is supported by the City's 2016 Water Efficiency Plan.

Uncompahgre Valley Water Users Association, Uncompahgre Tail Water Telemetry Project

Reclamation Funding: \$48,293

Total Project Cost: \$96,586

The Uncompahgre Valley Water Users Association, located in western Colorado, will install real-time satellite monitoring equipment at five head gate locations in Reclamation's Uncompahgre Project Area. Project benefits include improved management of water deliveries, reduction in spills, and enhanced operational efficiency, as well as continuous, real-time water data collection. This project is supported by the Colorado Water Plan and the Gunnison Basin Round Table Implementation Plan.

Idaho

Boise Project Board of Control, Automation of the Rawson Canal

Reclamation Funding: \$34,638

Total Project Cost: \$69,276

The Boise Project Board of Control, located in Boise, Idaho, will automate two of the five gates on the headworks of the Rawson Canal. This canal is the largest canal off the New York Canal, which is the main distribution canal for the system. Automation of the gates will enable remote opening and closing of the gates, which are currently manually operated. This will allow for greater control over gate operations and is

anticipated to reduce over-deliveries. This project is supported by the Board's 2010 Water Conservation Plan.

Egin Bench Canals Inc., SCADA and Remote Operations Project
Reclamation Funding: \$66,967 **Total Project Cost: \$133,933**

The Egin Bench Canals Inc., located in eastern Idaho, will install remote operating equipment on six main water control structures and flow measurement equipment and telemetry at four additional locations, as well as a Supervisory Control and Data Acquisition (SCADA) computer system for data collection and analysis. This project will provide real-time data that will enable more precise management and reduce spills. This project will implement one of the alternatives in the 2015 WaterSMART Henrys Fork Basin Study, which identified canal automation and remote operations as one of the most economical means of conserving water in the Henrys Fork River Watershed.

Fremont-Madison Irrigation District, SCADA and Automation Project
Reclamation Funding: \$41,674 **Total Project Cost: \$83,348**

The Fremont-Madison Irrigation District, located in eastern Idaho, will install remote operating equipment on three main control structures, flow measurement devices with telemetry capabilities at six additional sites, and a new Supervisory Control and Data Acquisition (SCADA) computer system in the District's office for data collection and analysis. This project will provide real-time data that will enable more precise management, including reducing spills. This project is supported by the District's 2009 Water Conservation Plan and was identified in the 2015 WaterSMART Henrys Fork Basin Study.

Mud Lake Water Users, Inc., System-Wide Automated Flow Measurement
Reclamation Funding: \$75,000 **Total Project Cost: \$160,000**

The Mud Lake Water Users, Inc., located in southeastern Idaho, will install five in-channel area velocity meters to measure groundwater discharge flows. Data from these meters will be transmitted through an existing Supervisory Control and Data Acquisition (SCADA) system. This project will improve flow management accuracy and help to identify water loss. This project is supported by the district's Water Management Plan and is consistent with a water management final order from the Idaho Department of Water Resources.

Shoshone-Bannock Tribes, Michaud Surface Water Measurement Telemetry Project
Reclamation Funding: \$63,496 **Total Project Cost: \$126,993**

The Shoshone-Bannock Tribes, located in southeastern Idaho, will install telemetry equipment for 71 existing flow meter sites on surface water pumps. The project will improve water measurement within the Michaud Unit of the Fort Hall Irrigation Project. This project will also help to reduce flow meter down time and identify areas of excess water use. The need for increased water measurement and accounting capacity was identified in the Tribes' 2006 Water Conservation Reconnaissance Study.

Kansas

Kansas Bostwick Irrigation District, Converting Ridge 3.9 and CW 9.5 Open Laterals to Buried Pipe Systems

Reclamation Funding: \$60,093

Total Project Cost: \$141,809

The Kansas Bostwick Irrigation District, located in northern Kansas, will convert 1.12 total miles of open laterals (laterals Ridge 3.9 and CW 9.5) to buried pipe. The project is intended to reduce seepage and evaporative losses to increase the reliability of deliveries in years of short supply. The Kansas Bostwick Irrigation District is part of Reclamation's Pick-Sloan Project.

Kansas Bostwick Irrigation District, Converting CW 10.6 Open Lateral to a Buried Pipe System

Reclamation Funding: \$66,418

Total Project Cost: \$143,524

The Kansas Bostwick Irrigation District, located in northern Kansas, will convert 1 mile of open laterals (lateral CW 10.6) to buried pipe. The project is intended to reduce seepage and evaporative losses to increase the reliability of deliveries in years of short supply. The Kansas Bostwick Irrigation District is part of Reclamation's Pick-Sloan Project.

Montana

Huntley Project Irrigation District, Flow Measurement Project, Phase I

Reclamation Funding: \$75,000

Total Project Cost: \$161,976

The Huntley Project Irrigation District, in southeastern Montana, will install three permanent flow measurement stations to provide real-time flow measurement data. This will allow the District to monitor flows in its three major canal systems and monitor lift station efficiency. The project is expected to reduce spills and provide the start of a comprehensive water measurement network, leading to better overall water management. Flow measurement and monitoring have been identified as a District priority.

Nebraska

Lower Platte North Natural Resources District, Assessing Aquifer Impacts through Remote Monitoring of Wells

Reclamation Funding: \$52,726

Total Project Cost: \$105,453

The Lower Platte North Natural Resources District, located in eastern Nebraska, will purchase and install remote read transmitters on 31 groundwater wells. The wells currently have data loggers but must be visited by staff to manually download the data. The new transmitters will allow quicker data acquisition and analysis. This project is supported by the Lower Platte River Contingency Plan, the District Groundwater Management Plan, and an Integrated Management Plan.

Twin Loups Irrigation District, Gate Automation and Metering Upgrades
Reclamation Funding: \$65,271 **Total Project Cost: \$138,698**

The Twin Loups Irrigation District, located in eastern Nebraska, will upgrade 40 existing mechanical propeller meters to electromagnetic meters and install dual automated gates to control return flow and releases between the Loup River and the Scotia Canal. This project will improve water delivery efficiencies and reduce canal spills. This project is prioritized in the Lower Loup Natural Resources District's Integrated Management Plan.

New Mexico

Fort Sumner Irrigation District, Canal Flow Telemetry and Automatic Head Gate Project
Reclamation Funding: \$24,972 **Total Project Cost: \$49,943**

The Fort Sumner Irrigation District, located in eastern New Mexico, will install telemetry equipment to monitor real-time flow data and will also install an automatic head gate controller. This project will help the District operate more efficiently and allow more consistent water deliveries. The project is supported by the 2016 DeBaca County Comprehensive Plan.

Ponderosa Mutual Domestic Water Consumers Association, Meter Upgrade Project
Reclamation Funding: \$25,000 **Total Project Cost: \$50,000**

The Ponderosa Mutual Domestic Water Consumers Association, located in northern New Mexico, will replace 202 mechanical water meters with new sonic meters. This project will help the Association to improve operational efficiencies, identify water leaks, and identify customer compliance with water use restrictions. Meter replacement is listed as an implementation policy in the Association's Water Conservation Plan.

Pueblo of Zia, Residential Metering Project
Reclamation Funding: \$70,320 **Total Project Cost: \$161,898**

The Pueblo of Zia, located in northern New Mexico, will install 40 radio-read meters at currently unmetered homes. The project is the first phase of a larger metering effort and will allow the utility to access accurate water usage data and begin an appropriate fee scale for system water users. The project will also allow the utility to better identify the location and extent of water system losses. This project is prioritized by a draft utility ordinance expected to be adopted by the Tribal Council in 2019.

Oklahoma

City of Elk City Public Works Authority, Residential Automatic Meter Reading Project
Reclamation Funding: \$75,000 **Total Project Cost: \$203,700**

The City of Elk City Public Works Authority, located in western Oklahoma, will replace 970 residential meters with new Automatic Meter Reading system units. This will improve the City's capability to detect leaks and reduce water losses. This project is supported by the City's 2016 5-Year Public Works Plan.

City of Tishomingo, Athletic Facility Irrigation Improvement Project
Reclamation Funding: \$28,600 **Total Project Cost: \$58,620**

The City of Tishomingo, located in southern Oklahoma, will install an irrigation system on three athletic facilities at Murray State College which are currently watered by inefficient and labor-intensive portable water cannons. This project is anticipated to increase efficiency of watering, which will increase water supply reliability in the area. This project is supported by the 2012 Oklahoma Comprehensive Water Plan Lower Washita Planning Region Report and a 2017 WaterSMART Drought Contingency Plan for the Arbuckle Aquifer.

Oregon

Horsefly Irrigation District, Daisy Canal (Brady Section) Piping Project
Reclamation Funding: \$74,400 **Total Project Cost: \$169,096**

The Horsefly Irrigation District, located in southern Oregon, will convert 3,100 feet of open canal to buried pipe. This project will decrease water lost to evaporation and seepage in the current system. Conserved water will help the District meet demands during times of water shortage. This project is supported by the District's Water Conservation Plan.

Ochoco Irrigation District, System Optimization: Ryegrass Canal Piping Project
Reclamation Funding: \$75,000 **Total Project Cost: \$182,878**

The Ochoco Irrigation District will convert 1,790 linear feet of unlined open canal to a closed piped system. This project will increase water delivery efficiency and reduce tailwater spills. This project is supported by the District's 2012 System Optimization Review and the District's 2018 System Improvement Plan.

Talent Irrigation District, Talent Main Canal Frink Orchard Shotcrete Project
Reclamation Funding: \$33,143 **Total Project Cost: \$66,286**

The Talent Irrigation District, located in southwestern Oregon, will line 960 feet of its Main Canal with shotcrete. This project will conserve water by reducing leaks and seepage, thereby providing a more reliable supply during below-average water years. This project supports goals in the District's 2018 Water Management and Conservation Plan.

Vanbrimmer Ditch Company, Conversion of Open Canal to Pipe
Reclamation Funding: \$63,663 **Total Project Cost: 127,325**

The Vanbrimmer Ditch Company, located in southern Oregon, will convert approximately 1,000 feet of open canal to a buried pipe system. This project will reduce water loss from evaporation and seepage to increase the reliability of supplies during dry years. This project is supported by the 2011 WaterSMART Klamath River Basin Study.

Westland Irrigation District, Integrated Flow Measurement and Control Gate Automation Project

Reclamation Funding: \$35,294

Total Project Cost: \$70,587

The Westland Irrigation District, located in northeastern Oregon, will install an automated flume gate near the bifurcation on its Main Canal into two separate canals. The flume gate will be integrated with the current Supervisory Control and Data Acquisition (SCADA) system and will allow the District to improve delivery efficiencies through better management of flows into the two canals. This project is supported by the District's 2018-2019 Priority Plan.

Texas

El Paso County Water Improvement District No. 1, Montoya Main and Montoya A Laterals Concrete Lining Project

Reclamation Funding: \$75,000

Total Project Cost: \$197,143

The El Paso Water Improvement District No. 1, located in El Paso, Texas, will install concrete lining along 1,110 feet of the Montoya Main Lateral and 2,920 feet of the Montoya A Lateral. The project is intended to allow for more storage in Elephant Butte and Caballo Reservoirs for a more reliable water supply during drought years. Improvements are also expected to mitigate damage caused by spills. This project is supported by the District's 2017 Water Conservation Plan and the Region E Far West Texas Water Plan.

El Paso County Water Improvement District No. 1, Advanced Metering Infrastructure Upgrades to Irrigation Wells

Reclamation Funding: \$75,000

Total Project Cost: \$157,111

The El Paso County Water Improvement District No. 1, located in El Paso, Texas, will install battery-powered electromagnetic flow meters on 50 shallow groundwater wells. This project will automate collection of flow data and connect the meters to telemetry systems, allowing integration with surface water data and enabling better coordination of water releases to reduce waste. This project is specifically mentioned in the 2017 Texas State Water Plan and the District's 2017 Water Conservation Plan and is part of a Recommended Water Management Strategy in the 2016 Far West Texas Water Plan.

Red River Authority of Texas, Automated Metering Infrastructure Program

Reclamation Funding: \$75,000

Total Project Cost: \$151,066

The Red River Authority of Texas, located in northern Texas, will install 550 new advanced metering infrastructure meters, including radio and computer reading equipment and a smart meter software system, for residential and commercial customers. This project will improve water use data collection and the ability to identify leaks. This project is supported by the Texas State Water Plan and the Red River Authority's 2014 Water Conservation Plan.

Sharyland Water Supply Corporation, Domestic Advanced Metering Infrastructure Project

Reclamation Funding: \$73,656

Total Project Cost: \$199,071

The Sharyland Water Supply Corporation, located in southern Texas, will install 730 advanced metering infrastructure meters on service connections in its domestic water distribution system. Water is currently lost to inaccurate measurement from outdated meters in the system and undetected leaks. The project will

enable better water management and more accurate leak detection. This project is prioritized in the Corporation's 2019 Comprehensive Water System Master Plan.

Wichita County Water Improvement District No. 2, Water Distribution Efficiency and Infrastructure Modernization Project

Reclamation Funding: \$74,924

Total Project Cost: \$151,066

The Wichita County Water Improvement District No. 2, located in northern Texas, will replace 3,200 feet of open concrete ditches and canals 24-inch buried plastic pipeline. The project will reduce water losses from seepage and evaporation, thereby increasing efficiency and improving reliability of irrigation deliveries and deliveries for local municipal users during drought periods. This project is a component of a larger, multi-phase project recommended in the Texas Region B Regional Water Plan as well as the District's 2009 Water Conservation Implementation Plan.

Utah

Bountiful Irrigation District, Secondary Water System Metering Project

Reclamation Funding: \$75,000

Total Project Cost: \$150,000

The Bountiful Irrigation District, located in northern Utah, will install 55 secondary water meters including for some of the District's largest water users. The project will enable better management of the District's water resources by providing more accurate water use data to water users. This type of project is identified in the Weber Basin Water Conservation District's Water Conservation Plan, which provides water to the District.

Draper Irrigation Company (WaterPro), Culinary Smart-Metering Project

Reclamation Funding: \$75,000

Total Project Cost: \$192,003

The Draper Irrigation Company (WaterPro), located in northern Utah, will replace 530 existing meters with ultrasonic smart meters equipped with cellular data transmission. The meters will provide more reliable and accurate data and improve leak detection and overuse. This project is part of the overall effort to modernize equipment in the culinary service area and is a priority in the Company's Water Conservation Plan.

Duchesne County Water Conservancy District, Bennett Water Association Operation Improvement Project

Reclamation Funding: \$75,000

Total Project Cost: 165,000

The Duchesne County Water Conservancy District, along with the Dry Gulch Irrigation Company and the Bennett Water Association, located in northern Utah, will install 300 feet of 24-inch high density polyethylene pipe to replace a section of the Harding Canal/Bennett Lateral, and expand and line Bennett Pond. The District will also install a water level sensor, a metered overflow weir, and a meter on the outlet pipe at Bennett Pond. The improvements are expected to result in a more consistent water supply during low water years. The project was identified as part of a master planning effort between the District and the Dry Gulch Irrigation Company.

Hights Creek Irrigation Company, Residential Pipe Improvement Project, Phase III
Reclamation Funding: \$75,000 **Total Project Cost: \$160,617**

The Hights Creek Irrigation Company, located in northern Utah, will replace 1,040 feet of residential transit distribution lines and galvanized steel service lines in an area identified as the Phase III location with new polyvinyl chloride distribution lines and high-density polyethylene service lines. In addition, the Company will install flow meters on each new residential service line. The project will reduce water loss by upgrading the existing lines and improve water use monitoring and leak detection. This project is the third phase of an activity listed as the top priority in Hights Creek's 2016 Water Conservation Management Plan.

Hights Creek Irrigation Company, Residential Pipe Improvement Project, Phase IV
Reclamation Funding: \$75,000 **Total Project Cost: \$160,617**

The Hights Creek Irrigation Company will replace an additional 1,040 feet of residential transit distribution lines and galvanized steel service lines in an area identified as the Phase IV location with new polyvinyl chloride distribution lines and high-density polyethylene service lines. In addition, the Company will install flow meters on each new residential service line. The project will reduce water loss by upgrading the existing lines and improve water use monitoring and leak detection. This project is the fourth phase of an activity listed as the top priority in Hights Creek's 2016 Water Conservation Management Plan.

Jordan Valley Water Conservancy District, Flip Your Strip: Localscape Rewards
Reclamation Funding: \$75,000 **Total Project Cost: \$183,414**

The Jordan Valley Water Conservancy District, located in central Utah, will facilitate several water-efficient landscaping rebate programs to encourage more efficient water use. The project will promote water conservation, thereby stretching available water supply in the region. The District prioritized these efforts in its 2014 Water Conservation Plan.

Town of Alta, Water Distribution Infrastructure Improvements
Reclamation Funding: \$67,385 **Total Project Cost: 134,770**

The Town of Alta, located in northern Utah, will modernize its water delivery system by upgrading the pump and pipe in the Bay City Mine Tunnel Pump House, upgrading the water meter supplying Alta Ski Lift Company, and switching fuel types for the lift pumps in the West Grizzly and Grizzly Gulch areas from propane gas to natural gas. The project will improve the reliability of the Town of Alta's water and provide more accurate monitoring of the quantity of water provided to Alta Ski Lift Company. This project is supported by the 2014 Town of Alta Capital Improvement Analysis, the 2011 Water System Future Improvement Plan, and the Drinking Water Source Protection Plan last updated in 2016.

Town of Springdale, Meter Installation Project
Reclamation Funding: \$75,000 **Total Project Cost: \$190,842**

The Town of Springdale, located in southern Utah, will purchase and install 78 water meters for its currently un-metered pressurized secondary irrigation system. The meters will enable more accurate measurement of water usage. Secondary meter installation is identified as a priority for the town in its 2009 Water Conservation and Management Plan.

Uintah and Ouray Indian Irrigation Project O&M Company, Uinta Pipeline Metering and SCADA Project

Reclamation Funding: \$75,000

Total Project Cost: \$197,000

The Uintah and Ouray Indian Irrigation Project Operation and Maintenance Company, located in northeastern Utah, will install flow meters and a Supervisory Control and Data Acquisition (SCADA) system along irrigation laterals on the Uinta Pipeline. This project will provide real-time water use and supply information to water managers, allowing them to better serve their customers by monitoring flow rates, pressures, and volume over time. The project is supported by the Bureau of Indian Affairs and the Uintah Water Conservancy District and is a priority for all three entities.

Weber Basin Water Conservancy District, Aqueduct Turnout and Secondary Lateral Metering Project, Phase II

Reclamation Funding: \$68,230

Total Project Cost: \$151,576

The Weber Basin Water Conservancy District, located in northern Utah, will install 11 magnetic flow meters on turnouts from the Davis Aqueduct, Weber Aqueduct, and larger secondary laterals. The flow meters will be connected to the District's automated metering infrastructure to help the District better manage water supplies, promote conservation and automate its existing metering system. This project is supported by a 2008 System Optimization Review and the District's 2018 Water Conservation Plan.

Washington County Water Conservancy District, Irrigation Efficiency Incentive Program

Reclamation Funding: \$75,000

Total Project Cost: \$150,000

The Washington County Water Conservancy District, located in southwestern Utah, will continue offering rebates for its municipal irrigation upgrade program. Rebates are provided for installing smart irrigation controllers, high-efficiency nozzles, and other upgrades to irrigation systems to conserve outside water use. This project will lead to increased water conservation within the District and is supported by the District's 2015 Water Management and Conservation Plan.

Weber Basin Water Conservancy District, Potable Water System Metering Project, Phase III

Reclamation Funding: \$75,000

Total Project Cost: \$176,453

The Weber Basin Conservancy District will also install 17 magnetic flow meters and upgrade two existing flow meters as a part of an ongoing effort to meter all existing potable water wholesale connections. The project will result in better management of the water system through better identification of water loss and increased reliability. This project is supported by a 2008 System Optimization Review and the District's 2018 Water Conservation Plan.

Washington

Columbia Irrigation District, Lateral 2 Mile 2.1 Liner Project

Reclamation Funding: \$73,538

Total Project Cost: \$146,877

The Columbia Irrigation District, located in central Washington, will line 850 linear feet of the District's lateral 2 canal. The District will upgrade the canal lining by reshaping and grading the canal, installing a membrane liner, and overlaying the membrane liner with a fiber reinforced concrete liner. The project will reduce seepage and prevent potential canal failures. The District identified canal lining in its 1997 Water Conservation Plan.

Greater Wenatchee Irrigation District, Electromagnetic Meter Installation
Reclamation Funding: \$75,000 **Total Project Cost: \$167,276**

The Greater Wenatchee Irrigation District, located in central Washington, will replace 35 analog propeller meters with electromagnetic meters and an automated meter reading system. The project will improve water management and mitigate water shortages due to drought. The District's 2018 Water and Energy Conservation Plan highlights analog meter replacement as a priority.

Quincy-Columbia Basin Irrigation District, Automation of the W27 Lateral Turnout on the West Canal

Reclamation Funding: \$23,130 **Total Project Cost: \$46,260**

The Quincy-Columbia Basin Irrigation District, located in central Washington, will replace an existing turnout gate in its W27 lateral with an automated Rubicon SlipMeter that will more accurately measure flow rates and enable automatic adjustments to flow changes. The project will conserve water and ensure more reliable water deliveries to farms. Canal automation was identified in the District's 2002 Water Conservation Plan, and automation of the W27 Lateral was added to the District's rolling list of potential system improvements in 2010.