

Fiscal Year 2023 Aging Infrastructure Projects

Arizona

Colorado River Front Work and Levee System: Arizona Palo Verde Division Bankline Road Repair

Reclamation Funding: \$7.04M

Rehabilitate approximately 4 miles of gravel road with new aggregate base from the Cibola Oxbow Bridge to Farmers Bridge.

Colorado River Front Work and Levee System: Brock Reservoir Forebay/Afterbay Inlet Gates Rehabilitation/Replacement Reclamation Funding: \$10.2M

Pending nondestructive testing, either replace all gates and frames, or implement operation and maintenance recommendations to replace bronze seats, refurbish frames and leafs, install cathodic protection and coat metal. Planned funding reflects rehabilitation by implementing recommendations.

Yuma Project: High Density Poly Ethelene Pipe Replacement for Yuma County Water Users Drainage System Reclamation Funding: \$6.5M

This project will fund all or part of the replacement of aging and failed HDPE Advanced Drainage System pipe that was installed during the expansion of Highway 95 in the Yuma area (during the mid1990s). This pipe has consistently failed, resulting in leaks which reach the surface in many cases, and require unplanned outages of the system to make expedient repairs.

Colorado River Front Work & Levee System: Laguna Dam Settling Basin Dredging Reclamation Funding: \$4M

This project will fund partial dredging of the Laguna Dam Settling Basin.

California

Central Valley Project: Delta Mendota Canal Jones Pumping Plant Excitation Cabinet

and Control Panel Refurbishment

Reclamation Funding: \$25M

Jones Pumping Plant Excitation Cabinet and Control Panel Refurbishment. Finding is provided for planning, design and subsequently, implementation.

Central Valley Project: Delta Mendota Canal Subsidence Correction Project

Reclamation Funding: \$25M

Funding is to complete required feasibility study and may be subsequently used for permitting and design costs after completion and acceptance by Reclamation of the study.

Central Valley Project: Folsom Dam Fiber Upgrade and Installation

Reclamation Funding: \$3M

Upgrading all fiber optics for entire Central California Area Office Folsom facility.

Central Valley Project: Folsom Dam Vessel Exclusion Barrier (VEB) Replacement

Reclamation Funding: \$7.5M

Replacement of the vessel exclusion barrier.

Central Valley Project: Folsom Pumping Plant Pumps and Pump Motors Replacement Reclamation Funding: \$10.5M

This Project is for Folsom Pumping Plant Pumps and Pump Motors Replacement. The contractor will remove and dispose of the old Pumps and Pump Motors, supply and install new Pumps and Motors in Folsom Pumping Plant.

Central Valley Project: Friant Kern Canal Capacity Correction

Reclamation Funding: \$22.2M

Correction of capacity constraints due to subsidence in Belmont Reach and below to Orange Cove. Funding is for required feasibility study as requested by the Authority and may be used subsequently for permitting and design costs after completion of the study and acceptance by Reclamation

Central Valley Project-San Luis Unit: Giannelli Pump-Generating Plant Unit 8 Motor Generator, turbine, and Butterfly Valve Refurbishment

Reclamation Funding: \$42.53M

Refurbishment of the San Luis Unit 8 motor generator, turbine, and butterfly valve.

Klamath Project: Klamath A Canal Reclamation Funding: \$5M

Planning Study for rehabilitation using alternative 4 (CB Wall) from the feasibility report. Klamath Irrigation District would also look at piping the canal for approximately 9 miles using HDPE Pipes.

Klamath Project: Klamath C Canal Reclamation Funding: \$3.75M

Slurry cutoff wall for approximately one mile using CLSM. Retrofit a check structure and modify one flume.

Newlands Project: Lake Tahoe Dam Replacement Reclamation Funding: \$3M

Funding is to perform a feasibility study to determine beneficiaries of Lake Tahoe Dam replacement, determine cost allocation and repayment requirements, create plans and specification for construction and complete construction to replace Lake Tahoe Dam.

Central Valley Project: Nimbus Fish Hatchery Nursery Phase IV Modernization Reclamation Funding: \$10M

Replaced existing fish ladder and diversion structure by constructing a flume upstream from the hatchery to a ladder structure in the basin of Nimbus Dam thereby using the dam as the upstream barrier instead of the existing fish pickets. The fish pickets limit the flow releases from Nimbus Dam into the lower American River which restricts releases during flood operations. This project will remove the fish diversion structure from the river channel.

Central Valley Project: Shasta Dam Refurbishment Tube Valves Reclamation Funding: \$14.74M

Refurbish elevation 750 tube valves. Funding provided to complete any required planning, design, and subsequently construction.

Central Valley Project: Shasta Dam Temperature Control Device Reclamation Funding: \$10M

Replacement of hangar rods and couplers on Shasta Dam Temperature Control Device.

Central Valley Project: Trinity Division, Spring Creek Power Facility Transformer Replacement Reclamation Funding: \$42.25M

Replacement of the transformers that provide power to pumps at Spring Creek, J.F. Carr and Trinity pump generation unites. The Pumps move water from the Trinity River into the

Sacramento River for using the Central Valley Project. Funding includes amount necessary to finalize required planning study and implementation.

Washoe Project: Stampede Dam Sandblast and Recoat Outlet Works Reclamation Funding: \$ 3.4M

Project to sandblast and recoat inside of outlet works pipe and penstock.

Central Valley Project: Trinity River Fish Hatchery Building Modernization Reclamation Funding: \$ 65.9M

Hatchery building infrastructure has been in continuous use for 60 years. The systems inside have exceeded their service lives and require modernization or replacement. This project will install a SCADA system; Replace corroded and leaking piping; Install new filtration system and incubator jars; Abate hazardous noise from hatchery operations; and Replace deteriorated iron supports for 150 shallow troughs and 26 deep tanks.

Colorado River Front Work and Levee System: Aha Quin Bypass Channel Reclamation Funding: \$ 700,000

Construct bypass channel culvert system in the Aha Quin West Channel to maintain flow in the channel after debris flow events from Manson Wash.

All-American Canal System: Imperial Dam All American Canal Desilting Basins Clarifier Arms Replacement

Reclamation Funding: \$5.67M

All American Canal Desilting Basins Clarifier Arms Replacement (72 Pedestals). Awarded amount is for required planning study and subsequent design.

All-American Canal System: Imperial Dam All American Canal Desilting Works Radial Gates Repair

Reclamation Funding: \$2.57M

Repair of unused radial gates.

Yuma Project: Laguna Dam Gate Refurbishment

Reclamation Funding: \$ 1.10M

Refurbish and install of Laguna Dam gate.

Colorado River Front Work and Levee System: Resurface Senator Wash Pumping

Plant Access Roads

Reclamation Funding: \$ 500,000

Resurface Senator Wash Pumping Plant Access Roads.

Colorado River Front Work and Levee System: Senator Wash Access Road Surfacing Reclamation Funding: \$ 500,000

Road Repair and Repaving: Ferguson Rd - Senator Wash Rd south to end loop.

Yuma Project: Siphon Drop Power Plant Governor Controls Reclamation Funding: \$ 700,000

Siphon Drop Power Plant provides generation critical to the budget of the Association. In the event of a power shortage from our upstream resources, namely Parker-Davis, it will serve critical load for the Association and Reclamation as part of the Yuma Valley groundwater control program.

Yuma Project: Yuma County Water Users' Association Transmission Line Improvements

Reclamation Funding: \$2.3M

This project will fund all or part of the replacement of some 220 pole structures on existing Association operated and maintained 34.5KV transmission line. The replacement of chemically treated wood poles with recyclable ductile iron or light steel poles will lead to a greater degree of resiliency within our system, while offering an expected life span of greater than 75 years.

Colorado

Leadville Mine Drainage Tunnel: Leadville Treatment Plant Construction of Mine Drainage Water Treatment Facility and Chemical Storage Building. Reclamation Funding: \$56M

Funding will finalize planning, design and subsequent construction.

San Juan-Chama Project: Upper Colorado River Storage Project Azotea Tunnel Outlet Transition and Drop Structures.

Reclamation Funding: \$1.5M

Remove and replace the Azotea Tunnel outlet transition and remove and replace the four existing drop structures due to degradation.

Animas La-Plata Project: Navajo Nation Municipal Pipeline Reclamation Funding: \$10.8M

Design/construction/compliance/commissioning cost of the new alignment, to mitigate risk of future slide damage, for the Navajo Nation Municipal Pipeline.

Idaho

Boise Project: Black Canyon Diversion Dam

Reclamation Funding: \$80,000

Repair coating system, areas of substantial pitting, and deteriorated rivets within Black Canyon Hydropump No. 1 and 2 steel conduit from section 13 to the hydropump. Repair the coating system, areas of substantial pitting and deteriorated rivets, on the lower hydropump discharge 84-inch steel conduit.

Boise Project: Lake Cascade State Park A5 Crown Point Trail Rehabilitation

Reclamation Funding: \$2M

Rehabilitate A5 Crown Point Train to meet Architectural Barriers Act, Section 504 and public safety under Boise Project Activity Plan 6350.

Boise Project: New York Canal Reclamation Funding: \$4M

Lining of six miles of New York Canal with Huesker lining between Boise Ave and Orchard Street Intersection to improve safety where canal passes through urbanized area and conserve water lost to seepage. Funding is for design and implementation after completion of planning study.

Montana

Pick-Sloan Missouri Basin Project: Canyon Ferry Unit

Reclamation Funding: \$3M

Canyon Ferry Silos Recreation Area Planning study aimed at evaluating options for improvement of visitor health and safety, access and comfort at the Silos Recreation Area. Funding is provided to complete a planning study.

Sun River Project: Pishkun Inlet Replacement

Reclamation Funding: \$5.03M

Replacement of the Pishkun Inlet Drop Structure.

Sun River Project: Pishkin Supply Canal

Reclamation Funding: \$11.55M

Rehabilitation of a portion of the Pishkun Supply Canal Tunnel No. 3 in response to minor crown failure in 2020.

North Dakota

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Reclamation Funding: \$1M

Upgrades to the Spirit Lake Office includes upgrading windows, roof, siding, and improvements to the office space.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Spirit Lake Tribe R5 Tank

Plan Access Road

Reclamation Funding: \$255,000

This project includes repairing the access road to the R5 Tank on the Spirit Lake Rural Water System.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Spirit Lake Saint Michael Reservoir Recoat

Reclamation Funding: \$400,810

This project includes repairing the interior and exterior coating system on the Saint Michael pedestal spheroid water tank.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Spirit Lake Tribe Water Treatment Plant Access Road Repair Reclamation Funding: \$536,560

This project includes repair and upgrade of the access road to the Spirit Lake Water Treatment Plant.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Standing Rock Tribe Cannonball Asbestos Cement Pipe Replacement Reclamation Funding: \$5.3M

Includes replacement of 6,265 feet of asbestos cement pipe with HDPE pipe and related appurtenances within the town of Cannonball, North Dakota on the Standing Rock Indian Reservation.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Standing Rock Tribe Embankment Stabilization Repair Reclamation Funding: \$91,162

This project includes stabilizing embankment sloughing from erosion caused by wave action and high-water elevations from previous years. A pipe runs through the embankment that delivers

irrigation water to fields. The pipe was damaged from embankment sloughing in 2021, resulting in a loss of water for a short time during a peak water demand time.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Standing Rock Tribe Kenel AC Pipe Replacement

Reclamation Funding: \$2.16M

Kenel AC Pipe Replacement Includes replacement of 3,200 feet of Asbestos Cement pipe with HDPE pipe and related appurtenances within the town of Kenel, South Dakota on the Standing Rock Indian Reservation.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Standing Rock Tribe Master Meter Upgrades

Reclamation Funding: \$1.9M

This project includes four master meter replacement and upgrades to two casino vaults, Sitting Bull College, and Fort Yates School Loop.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Standing Rock Tribe Office and Shop Upgrades

Reclamation Funding: \$1.02M

This project includes upgrading windows, roof, siding, and improvements to the office space.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Standing Rock Tribe Wakpala Pipeline Relocation Reclamation Funding: \$125,000

This project includes relocating approximately 690 feet of pipe in a slide area along Highway 1806 to the opposite side of the road to avoid a possible break in the waterline as the hill continues to slide.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Little Shell Booster Station and Pipeline Reclamation Funding: \$1.75M

Construct Booster Station and pipeline to serve the Little Shell Water System - a booster station and pipeline must be constructed so the Parshall Regional Water Treatment Plant can hydraulically serve the Little Shell water system.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Four Bears Ground Storage Tank Replacement Reclamation Funding: \$3.5M

Construct Replacement Four Bears Ground Storage Tank. The tank was damaged in a windstorm, necessitating permanent repairs. Given the existing deficiencies of the tank, replacing the existing tank with a new hydraulically higher tank with 500,000 gallons of storage is the best alternative.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Four Bears Maintenance Storage Building Reclamation Funding: \$1.77M

Construct Maintenance Storage Building for Four Bears Service Area. Fort Berthold Rural Water System does not have a maintenance storage building located adjacent to the existing Water Treatment Plant in Four Bears water service area on the reservation. This storage building is needed to store repair parts and equipment out of the weather.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Four Bears Water Treatment Plant and Intake Equipment Reclamation Funding: \$1.5M

Replace Four Bears Water Treatment Plant and Intake Equipment and Pumps to Increase Capacity to 1,000 gallons-per-minute. The existing Four Bears WTP operates at near capacity and engineering analysis indicates that the water treatment plant capacity should be increased 1,000 gpm to meet future water demands.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Installation of Backup Power Generators Reclamation Funding: \$2.48M

Installation of 24 backup power generators at Fort Berthold Rural Water System Facilities to ensure continued delivery of drinking water to residents of the Fort Berthold reservation during power outages.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Mandaree Intake Access Road Improvements Reclamation Funding: \$1.13M

A landslide in 2019 severely damaged the intake access road, making the intake inaccessible until temporary repairs were completed. This project would construct a new access road.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Mandaree Intake Landslide Prevention Project Reclamation Funding: \$1M

The Mandaree intake site had a major landslide event in 2019, resulting in recommendations that additional slope protection measures be installed including buried H-pile wall and tiebacks to protect the intake site.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Mandaree Water Treatment Plant Intake Slope Tube Protection Project Reclamation Funding: \$4.59M

A major landslide at the Mandaree Water Treatment Plant intake site in 2019 caused significant damage to the rip rap that protects the three intake slope tubes. Temporary repairs were made to prevent slope tubes from ice and freezing damage in the winter. Further damage has since been caused by wave action during record high Lake Sakakawea water levels. The project would provide permanent repairs to the intake slope tube cover including installation of cover material, geotechnical material, gravel bedding and rip rap.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Mandaree Water Treatment Plant Replacement Reclamation Funding: \$20.1M

The existing Mandaree Water Treatment Plant operates at near capacity. A future water demand analysis shows the capacity needs to be increased to 1,000 gallons-per-minute. An engineering analysis of alternatives was conducted and it was determined that the best alternative was to construct a new water treatment plant. Funding is provided for planning, design, and subsequently implementation.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Mandaree, Parshall-Lucky Maintenance Storage Building Reclamation Funding: \$7.08M

Construct Storage Buildings at Mandaree, Parshall-Lucky Mound, Twin Buttes, and White Shield Service Areas - Fort Berthold Rural Water does not have maintenance storage buildings strategically located in these four water system service areas on the reservation. These buildings are needed to store repair parts and equipment out of the weather in these areas of the reservation which also reduces response time during emergencies.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes Replacement Admin and Shop Building Reclamation Funding: \$8,63M

Reclamation Funding: \$8.63M

The current Fort Berthold Rural Water System Administration office and shop building in Four Bears is inadequate in size and the current location does not allow room to expand that building or the yard area to store equipment and operation and maintenance repair parts. The best solution is to abandon the current building and build a new building in a more rural area with adequate space.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Three Affiliated Tribes White Shield Booster Station and Pipeline Reclamation Funding: \$850,000

Construct Booster Station and Pipeline to serve the White Shield Water System. A booster station and pipeline need to be constructed so the Parshall Regional water treatment plant can hydraulically serve the White Shield water system.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Turtle Mountain Three-Mile Road Replacement

Reclamation Funding: \$1.85M

Three-Mile Road replacement includes the replacement of the service lines and connections to the watermains and a road bore to facilitate the replacements.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Turtle Mountain Belcourt Water Main Replacement Reclamation Funding: \$4M

Replacement of existing watermain and curb stops within the Belcourt Housing area. Replacement of approximately one mile of watermain, half mile of service line replacement, pressure reducing valves, manholes, curb & gutter, and road replacement. Reclamation funds will only be used on the water portion of the job, with sewer work funded with other federal sources.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Turtle Mountain Highway 3 and BIA 8 Main Replacement Reclamation Funding: \$6M

Replacement of the existing glued PVC watermain along Highway 3 and Bureau of Indian Affairs 8 with new pipe. The project would also extend the watermain southwest of Highway 3 and BIA 8 intersection to create a loop. The extension work would be included in the project but not

funded through this application. Total length of proposed water main pipe would be approximately nine miles.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Turtle Mountain Replacements and Leak Repair Reclamation Funding: \$400,000

Replacement of faulty infrastructure throughout the rural water system including hydrants, valves, and leaking water lines.

Pick-Sloan Missouri Basin Project: Garrison Diversion Unit Turtle Mountain Water Treatment Plant Improvements Reclamation Funding: \$773,707

Improvements Replacements and Rehabilitation of the Turtle Mountain Rural Water System Water Treatment Plant. Work includes replacement of process piping, coatings, rehab of sludge basin, replacement of sludge pump, installing floor drains, replacement of septic system, repair of lift station, HVAC, & electrical.

New Mexico

Rio Grande Project: Caballo Dam and Reservoir Bonita Lateral Upgrade Reclamation Funding: \$7.1M

Rio Grande - Bonita Lateral Upgrade Assessment will be made of the life expectancy of the Bonita pipe. If determined necessary, the remaining funds will be used for replacement or relining of pipe as recommended by the evaluation.

Rio Grande Project: Elephant Butte Historic District Recreation Area Restaurant and Patio

Reclamation Funding: \$1.78M

Complete study, design, and estimate to fix the restaurant patio. Construction to repair foundation, drainage, building, roof, solar panels, etc.

Rio Grande Project: Elephant Butte Historic District Roads and Parking Lots Rehabilitation

Reclamation Funding: \$3.39M

Rehabilitation of Elephant Butte Historic District interior roads and parking lots. This project includes all of the interior roads and parking lots at the historic district.

Rio Grande Project: Elephant Butte Recreation Area Water Infrastructure Rehab Reclamation Funding: \$9.6M

Remove existing cast iron piles, reroute water lines to bypass old tanks, install a lift station, three new low profile tanks, upgrade distribution system lines.

Middle Rio Grande Project: El Vado Dam and Reservoir Repair Reclamation Funding: \$4M

Repair damaged concrete at the base of the El Vado Dam outlet works stilling basin to prevent additional damage.

Middle Rio Grande Project: Rio Grande Channelization Lower San Acacia Reach Improvements

Reclamation Funding: \$4.5M

This project is extraordinary maintenance of existing assets to improve water conveyance, maintain or increase habitat available to endangered species, and improv cost-effectiveness of operation and maintenance actions. Funding is provided to complete a planning study.

Nevada

Washoe Project: Marble Bluff Dam Bank Stabilization Reclamation Funding: \$2.43M

Marble Bluff Dam dredging of island which has formed directly above Marble Bluff Dam and bank stabilization to reduce the bank erosion upstream of Marble Bluff Dam.

Oregon

Umatilla Project: Hermiston Irrigation District Cold Spring Dam and Reservoir Outlet

Gates Replacement

Reclamation Funding: \$703,000

Remove and replace the upstream-most outlet works gate house access footbridge support.

The Dalles Project: Creek Plant Surge Tank Installation Reclamation Funding: \$2.2M

Mill Creek Plant needs a surge tank since original motors with flywheels have been replaced with modern motors and no flywheels.

Deschutes Project: North Unit Main Canal Fish Screen Rehab or Replacement Reclamation Funding: \$10M

Rehabilitate or replace fish screens at the headworks. Fish exclusion into the North Unit Irrigation District main canal is necessary to meet current Oregon Department Fish and Wildlife requirements and future HCP requirements as the district has no incidental take coverage for ESA listed species in its canals.

Umatilla Project: West Extension Main Canal West Division Rehabilitation Reclamation Funding: \$60,000

Rehabilitate 2800 linear feet of the main canal by relining with Geo-Foam lining for 40% and new concrete panels for 60% of the project. Will also install drainage system for 60% of the project as groundwater is causing the deterioration of the lining.

South Dakota

Mni Wiconi Project: Lower Brule Booster 1 and 2 Reclamation Funding: \$500,000

Generators Installation of 2 Backup Power Generators at Lower Brule Rural Water System (LBRWS) Facilities that require a backup power source to ensure continued delivery of drinking water to residents of the Lower Brule reservation and surrounding area during power outages.

Mni Wiconi Project: Ogalala Sioux Tribe Oblaya Pipeline Replacement Reclamation Funding: \$3.5M

Construction of approximately 11-miles of PVC watermain and appurtenances that has experienced failures leading to the disruption of water service.

Mni Wiconi Project: Ogalala Sioux Tribe South Core Reservoir 4 Reclamation Funding: \$8.67M

The project constructs a one-million-gallon elevated water storage tower near Kadoka, South Dakota. The proposed tower will add system redundancy to ensure continued service to sponsors during the significant leak repairs the system has been experiencing.

Mni Wiconi Project: Ogalala Sioux Tribe Water Treatment Plant and Intake Generators Reclamation Funding: \$2.8M

Installation of two generators, transfer switches, and appropriate controls at the water treatment plant and intake pump station to provide backup power. The generators are sized to sustain operations at minimum service levels during a short-term power outage.

Mni Wiconi Project: Ogalala Sioux Tribe Water River Bore Crossing Replacement Reclamation Funding: \$5M

The project replaces a river crossing underneath the White River south of Kadoka, South Dakota. The current crossing has experienced significant erosion, causing increased risk to distribution structures that are adjacent to the river. In addition, the pipeline is currently believed to be leaking under the river. The project will install a new river crossing bore and new structures located at distances away from the river.

Mni Wiconi Project: Rosebud Sioux Tribe Big White River Booster Rebuild Reclamation Funding: \$1.7M

Replacement of the aging Big White River Booster Station, which is the main pump station that conveys clean drinking water to multiple towns and tribal communities. This station suffers from inadequate capacity, reduced useful life, significant deterioration, and is considered a confined space.

Washington

Yakima Project: Roza Fish Screen Reclamation Funding: \$3M

Modifications to the Roza Fish Screen.

Columbia Basin Project: West Canal Replacement Reclamation Funding: \$4.125M

The West Canal has visible flowing water from the tow of the slope. This seepage has been observed for many years and begins to flow shortly after Quincy Columbia Basin Irrigation District (QCBID) fills the West Canal. The District will replace approximately 1,500 linear feet of the West Canal. Completion of this project will conserve water, protect homes downstream from damage, and ensure uninterrupted water delivery to farmers in the district. Existing subgrade material will be removed and replaced with suitable material to stabilize the foundation. An underground drainage system with pumps will be installed to reduce groundwater infiltration. The pumped water would be returned to the West Canal.