



— BUREAU OF —
RECLAMATION

FY 2024 WaterSMART

Title XVI Congressional Authorized Project Selections

Hawaii

Honolulu Board of Water Supply, Kalaeloa Seawater Desalination Project **Reclamation Funding: \$18,973,728**

The Honolulu Board of Water Supply, which manages the municipal water resources and distribution system on the island of Oahu, will design and build a new seawater reverse osmosis desalination facility in Kalaeloa, Ewa, Oahu. The desalination facility will create a new reliable source of water supply therefore reducing the reliance on groundwater in Oahu. This project is a long-range sustainable water supply option to help meet the increased demands as the Ewa District grows. The project will also provide high quality sustainable potable water during periods of drought for climate change resilience and will reduce water transfers from Central Oahu to Ewa. The proposed seawater desalination facility will produce 1.7 million gallons per day (MDG) of potable water with provisions for future expansion to 5 MGD. The project components consist of seawater supply wells, injection wells, reverse osmosis system and building, storage tanks, pump stations, and transmission pipelines. Once completed, the project will have a capacity of 1,904 acre-feet of desalinated water annually.

Texas

City of Round Rock, Expansion of the City of Round Rock's Reclaimed Water **Distribution System**

Reclamation Funding: \$4,223,469

The City of Round Rock, located within Williamson County, Texas, will complete an addition to the city's existing reclaimed water distribution system. Reclaimed water is conveyed from the Brushy Creek Regional Wastewater Treatment Plant (WWTP) to customers within the city. This project will allow the city to distribute the reclaimed water to new areas that are rapidly growing in population and commercial development. As the city continues to grow and water resources become scarce and droughts threaten to limit freshwater availability, the recycled water will continue to be an important resource to provide a drought-resistant and sustainable water supply for non-potable water uses. This funding will build water storage and pumping improvements to the WWTP and approximately 5 miles of distribution pipelines to serve the additional customers. Upon completion, the project will have a capacity of 13,452 acre-feet of recycled water annually.

WIIN Act Title XVI Project Selections

California

Irvine Ranch Water District, Syphon Reservoir Improvement Project

Reclamation Funding: \$12,299,375

Irvine Ranch Water District (District), located in Orange County, California, will enlarge the existing Syphon Reservoir to increase the storage capacity of recycled water. During periods of low demand, surplus recycled water and excess treated sewage effluent are currently discharged to the ocean because of the limited storage capacity. Surplus recycled water is discharged to the ocean during periods of low demands, while purchased imported water is needed to supplement its recycled water system during periods of high demands. This project will allow the district to store more recycled water and optimize its use during peak demand periods which will sustain the available water supply. Additional storage for recycled water during the winter months will allow the district to meet more demands using recycled water, which will offset 2,300 acre-feet of imported supplies annually during peak demand periods.

Jurupa Community Services District, Joint IEUA-JCSD Recycled Water Intertie Project

Reclamation Funding: \$5,325,000

The Jurupa Community Services District (JCSD), located in Riverside County, California, will construct new recycled water pipeline to convey recycled water to customers within the JCSD's service area and to Inland Empire Utilities Agency (IEUA) connection points. The new recycled water source will replace the current use of potable water for irrigation on parks, schools, streetscapes, and medians. The conversion from potable to recycled water use will assist in reducing the need for imported water supplies, increase local water supply, enhance water resilience during drought emergencies, amplify groundwater recharge, and minimize groundwater pumping. Upon completion, 3,625 acre-feet of recycled water will be made available by the project each year.

Kansas

City of Dodge City, Wastewater Reuse via Managed Aquifer Recharge - Securing Future Water Supply and Restoring the Ogallala Aquifer

Reclamation Funding: \$14,250,000

The city of Dodge City in Kansas will make upgrades to its existing water treatment process and infrastructure to discharge treated wastewater effluent into the Arkansas Riverbed, which will recharge the Ogallala Aquifer and create additional groundwater resources at existing well sites. This project will assist the city in addressing the rapidly depleting source of groundwater, degrading water quality, frequent and severe droughts, no surface water availability, and population growth. The components of this project include anaerobic-anoxic-aerobic biological nutrient removal, membrane bioreactor, ultraviolet disinfection, soil-aquifer treatment, as well as a pump station, pipelines, and discharge infrastructure. Upon completion, 4,147 acre-feet of recycled water is expected to be made available annually.

Nevada

Truckee Meadows Water Authority, Advanced Purified Water Facility at American Flat Project

Reclamation Funding: \$30,000,000

The Truckee Meadow Water Authority in Reno, Nevada, will enhance an existing water reclamation facility's infrastructure and treatment process to inject recycled water into a local aquifer for future extraction and use. The Advanced Purified Water Facility (APWF) at American Flat Project will increase and protect the water supply in northern Nevada to address climate change impacts and provide an effluent disposal option to decrease environmental discharges to Sawn Lake. The components of the project include design and construction of the APWF, upgraded water treatment facilities, pump station improvements, wells, and conveyance pipelines. The American Flat Project is a multi-benefit solution that will produce 2,000 acre-feet per year of potable water.

WIIN Act Desalination Construction Project Selections

California

City of Oceanside, Mission Basin Groundwater Purification Facility (MBGPF) Well Expansion and Brine Minimization

Reclamation Funding: \$5,285,714

The City of Oceanside, located in southern California, will increase the Mission Basin Groundwater Purification Facility's capacity to extract and treat brackish groundwater from Mission Basin. This will enable the city to increase the amount of drinking water produced and decrease the city's reliance on imported water while also reducing the volume of brine discharged to the Pacific Ocean. The project will construct a new groundwater extraction well, install optimization technology on existing groundwater wells, construct raw water conveyance facilities and reverse osmosis treatment train, upgrade existing treatment trains, and build a new reverse osmosis process building. The project once completed will provide 881 acre-feet per year of potable water.

San Diego County Water Authority, Lewis Carlsbad Desalination Intake Permanent Upgrade Project

Reclamation Funding: \$19,393,750

The San Diego County Water Authority in California, through a public private partnership with Poseidon Channelside, will modify the intake and discharge facilities at the Carlsbad Desalination Plant (CDP). The project will enhance current operations by improving the existing seawater intake system to secure local reliable water supply for the region. The CDP's original intake structure that supported power generation is being decommissioned, and the intake upgrades included in this project will allow for stand-alone operation at the plant. Funding will be used for modifications to existing intake and discharge operations and construction of a new screening structure. The project will provide for environmental enhancements and continue to reduce the region's demand for imported water from the California Sacramento-San Joaquin River Delta and the Colorado River.

South Coast Water District, Doheny Ocean Desalination Project

Reclamation Funding: \$7,749,500

The South Coast Water District will construct an ocean water desalination facility located at Doheny State Beach in Dana Point, California. The project will create a drought resistant and reliable source of potable drinking water for the region, reduce dependence on imported water, and provide for an emergency water supply in event of a natural disaster or disruption of service to imported water. The facility will have an initial capacity of up to 5 million gallons per day (MGD), with potential for future expansion up to 15 MGD. The project components include a subsurface slant well intake system, infrastructure improvements to Doheny State Beach Campground, seawater conveyance, a seawater desalination plant, brine disposal through an existing wastewater ocean outfall, solids handling facilities, and potable water distribution infrastructure. Once completed, the project will have a capacity of 5,321 acre-feet per year of potable water.

Water Replenishment District of Southern California, Torrance Groundwater Desalter Expansion

Reclamation Funding: \$25,070,100

The Water Replenishment District of Southern California, in Los Angeles County, California, will expand an existing Torrance Groundwater Desalter facility to extract and remediate a brackish groundwater plume. The treated groundwater will provide additional drinking water supply for the City of Torrance. The project will increase the reliability of local water supplies, improve and protect groundwater quality, and accommodate growing potable water demands. The project will also allow for new groundwater supply well construction in areas that were previously impacted by poor water quality. The project includes additional extraction wells, pipelines, pretreatment system, expanded reverse osmosis system and site improvements and expansion of the desalter facility. Once completed, the project will provide 7,100 acre-feet per year of potable water.