



## 2023 Water Recycling and Desalination Construction Planning Funding Selected Projects

### California

#### **City of Burbank, Potable Reuse Planning, Environmental Compliance, and Pre-Final Design Study**

**Reclamation Funding: \$400,000**

**Total Project Cost: \$800,000**

The City of Burbank (City), located in Los Angeles County, California, will assess the feasibility of purifying a portion of the City's recycled water for potable uses to maximize the beneficial use of 4.2 million gallons per day of recycled water that is currently produced by the City but is discharged to the ocean. The City plans to use the recycled water to augment potable supplies, including augmenting groundwater by surface spreading or well injection. The City is currently 100% dependent on imported potable water supplies from the State Water Project and the Colorado River, and the use of recycled water for potable uses will provide a drought resilient water source and reduce the City's reliance on imported supplies. The study's scope of work will include a feasibility assessment, facility planning, environmental compliance, pre-final design, and community outreach and engagement to ensure public support.

#### **City of Cloverdale, Recycled Water Planning Program**

**Reclamation Funding: \$577,500**

**Total Project Cost: \$1,155,000**

The City of Cloverdale (City), located in northern California, will assess the feasibility of utilizing recycled water from its wastewater treatment facility to supply an estimated 260 acre-feet of recycled water annually. Based on current and projected water use, approximately 30 percent of the City's water demands could be met with recycled water, which would significantly reduce strain on existing surface water supplies. Advancing the use of recycled water will improve drought resiliency by allowing the City to offset a portion of its potable water use. Planning activities will include a feasibility study, a basis of design and pre-design report, and public outreach to foster support of using recycled water as a sustainable option to enhance water supply reliability and combat the escalating impacts of drought. The study will focus on potential agricultural sites and existing large, landscaped areas that can be converted to recycled water for irrigation. Additional potential recycled water uses, such as cooling tower use and other industrial uses, will also be investigated.

## **City of Los Angeles, Hyperion 2035: Phase 1 Project**

**Reclamation Funding: \$5,000,000**

**Total Project Cost: \$21,415,458**

The City of Los Angeles (City), in southern California, is undertaking planning efforts for the first phase of its city-wide integrated water resources strategy, Hyperion 2035. Hyperion 2035 includes implementation of new infrastructure at the existing Hyperion Water Reclamation Plant to establish advanced treatment capacity. This includes the conversion of existing secondary facilities to membrane bioreactor facilities, which combine biological processes with membrane filtration treatment methods to produce high-quality effluent, along with the addition of an advanced water purification facility with reverse osmosis and ultraviolet advanced oxidation. Phase one of Hyperion 2035 is expected to result in 56,044 acre-feet of recycled water annually for injection in the West Coast Barrier Central Basin. The City imports 90 percent of its water from non-local sources that are subject to significant hydrologic variability, leaving the City vulnerable to drought and other effects of climate change. Hyperion 2035 will meet long-term sustainability goals by reducing imported water use, increasing local water supplies, and diversifying the City's water portfolio to enhance long-term reliability. Current planning activities will advance Phase one of Hyperion 2035 to 10 percent design, allowing the City to begin the procurement process for a construction contractor.

## **City of Los Angeles, Donald C. Tillman Water Reclamation Plant Advanced Water Purification Facility Project**

**Reclamation Funding: \$318,823**

**Total Project Cost: \$1,275,293**

The City of Los Angeles (City) is completing design and engineering activities to implement the Donald C. Tillman Water Reclamation Plant Advanced Water Purification Facility Project. The planned advanced water purification facility is expected to produce up to 17,000 acre-feet per year of recycled water for indirect potable reuse to replenish the San Fernando Valley Groundwater Basin, a critical source of local water supply. This is a significant capital project for the City's water recycling infrastructure, which aims to produce a new, local, resilient, and reliable water supply to sustain local groundwater basins, diversify the City's water portfolio, and decrease the region's dependence on imported water. Local water supply problems stem from the ongoing climate change crisis and are exacerbated by the City's reliance on imported water. The planned project will help address these concerns by strengthening the City's local water supply and reducing its dependence on imported water.

## **City of Oceanside, City of Oceanside – Water Reuse, Recycling and Seawater Desalination Feasibility Study**

**Reclamation Funding: \$201,000**

**Total Project Cost: \$403,785**

The City of Oceanside (City), located in southern California, seeks to expand upon the completed Phase I of the Pure Water Oceanside Title XVI water reuse project by continuing to develop new sources of water supply. The City relies on imported water from the State Water Project and Colorado River for nearly 79% of its water supply. Over the past three years, the region has experienced extreme drought conditions that reduced State Water Project and Colorado River

system storage levels to historic lows, significantly reducing imported water allocations. In an effort to continue developing new, local, and drought resilient sources of water supply, the City will develop the Water Reuse, Recycling and Seawater Desalination Feasibility Study. The study will analyze project alternatives that includes options for expanding the treatment and beneficial use of wastewater effluent, the capture and reuse of storm water, and desalination of seawater. The study will include current estimates of recycled water demand and seasonal patterns, as well as comparative cost information for all alternatives.

### **City of San Diego, Pure Water San Diego, Phase 2**

**Reclamation Funding: \$750,000**

**Total Project Cost: \$3,000,000**

The City of San Diego (City), California will develop planning studies for Phase 2 of its Pure Water San Diego project. The planned Pure Water Phase 2 is expected to treat wastewater to provide up to 53 million gallons per day of recycled water to the central part of San Diego. A 5-step treatment process will be used to treat recycled water to potable standards for either direct or indirect reuse, using existing reservoirs to store the purified water. Currently, more than 85% of the City's water is imported; however, the combined phases of Pure Water San Diego are ultimately expected to provide water for nearly half of the City's water supply. Planning efforts will include the evaluation of proposed facility sites, analysis of pipeline alignment options, and the selection of a reservoir to store the recycled water.

### **City of Santa Monica, Santa Monica OneWater Project**

**Reclamation Funding: \$961,033**

**Total Project Cost: \$1,922,066**

The City of Santa Monica (City), located in Los Angeles County, California, will implement planning for the OneWater Project which includes expanding indirect potable reuse and advancing direct potable reuse treatment strategies to provide an additional 4,500 acre-feet annually of locally sourced water supply. Through the OneWater Project, the City will reduce its dependence on imported water from the State Water Project and the Colorado River both of which have faced historic shortages and compromised reliability due to climate change. Onewater will allow the City to continue addressing water supply concerns including shortages, groundwater depletion, and deteriorating groundwater quality while also improving water supply reliability to support regional affordable housing needs. Current planning activities will include confirming feasible locations and preliminary design to increase groundwater recharge via direct injection, planning to implement regional indirect potable reuse with the City of Los Angeles, and developing treatment strategies to achieve desired water quality for direct potable reuse.

### **City of Yuba City, Wastewater Treatment Facility Advanced Treatment and Recycled Water Feasibility Study**

**Reclamation Funding: \$249,999**

**Total Project Cost: \$499,998**

The City of Yuba City (City), located in northern California, will assess the feasibility of converting its wastewater treatment facility to a tertiary treatment plant with a conveyance system to

distribute recycled effluent to customers. The City currently relies on surface water from the Feather River as its primary source of water, and future water shortages are expected to worsen as drought and climate change continue to impact the area. In an effort to develop a new drought resistant water supply, the City's recycled water feasibility study will be used to identify a cost-effective strategy to increase capacity to produce and distribute reclaimed water, primarily for outdoor use and agriculture. The study will also consider opportunities for groundwater recharge and strategies to improve water quality through advanced tertiary treatment.

### **County of San Luis Obispo, Desalination Executable Solution and Logistics (DESAL) Plan**

**Reclamation Funding: \$548,410**

**Total Project Cost: \$1,096,820**

The County of San Luis Obispo (County), located on the central coast of California, will develop Phase 2 of its DESAL Plan. Despite ongoing efforts to conserve water and develop new water supplies, the County faces long-term water supply shortages and sustainably challenges to meet future water demands. Desalination is a County priority to address current and projected water supply imbalances. As part of the Phase 2 DESAL Plan development, the County will investigate and evaluate saline and brackish water sources, treatment technologies, and uses for the treated water. Planning activities will include developing and implementing a public and stakeholder engagement process, developing ranking criteria for concept alternatives, identifying concept alternatives, and developing a short-list of preferred projects to further pursue.

### **Inland Empire Utilities Agency, Chino Basin Advanced Treated Recycled Water, Storage, and Production**

**Reclamation Funding: \$2,843,353**

**Total Project Cost: \$11,373,412**

The Inland Empire Utilities Agency, located in San Bernardino County in southern California, will complete planning, regulatory compliance and permitting, and pre-final design activities for the Chino Basin Program (Program). Once constructed, the Program will include an advanced water purification facility to provide approximately 15,000 acre-feet per year of treated water for recharging the Chino Basin. Groundwater in the area is affected by high concentrations of salts, nitrates, and other constituents. By replenishing the groundwater basin with highly treated recycled water, the Program will improve the sustainability of a resource that would otherwise be gradually degraded beyond use, resulting in loss of local supplies and increased reliance on State Water Project supplies. The project will also provide more flexibility during future extended droughts.

### **Mesa Water District, Local Groundwater Supply Improvement Project**

**Reclamation Funding: \$250,000**

**Total Project Cost: \$500,000**

The Mesa Water District, located in Orange County, California, will develop a feasibility study for a potential new brackish groundwater desalination facility. Coastal agencies in the study area face water supply challenges from climate change induced imbalances of water supplies and

demands as well as challenges related to seawater intrusion to the local groundwater basin. The study will evaluate alternative groundwater well locations through a siting analysis and groundwater modeling and identify optimal wellfield locations to mitigate the impacts of seawater intrusion, identify infrastructure and environmental compliance needs, and assess potential treatment options for brackish groundwater. The planned facility is expected to make between 5,600 and 8,960 acre-feet of desalinated water available annually, which will supplement local supplies, providing a flexible water source during shortages and addressing water sustainability concerns in an area.

### **Metropolitan Water District of Southern California, Large Scale Water Recycling Planning for Pure Water Southern California**

**Reclamation Funding: \$5,000,000**

**Total Project Cost: \$20,000,000**

The Metropolitan Water District of Southern California is developing its Pure Water Southern California program to beneficially reuse wastewater from Los Angeles County Sanitation District that currently is being discharged to the Pacific Ocean. Planning and design activities will include completing a feasibility study to meet requirements for Reclamation's Large-Scale Water Recycling Program and preliminary design work for the initial reaches of a conveyance pipeline and modifications to manage nitrogen in the new water supply. At completion, Pure Water Southern California is expected to provide approximately 155,000 acre-feet per year of recycled water to the Southern California region. Drought conditions in the region have led to severe reductions in Colorado River runoff and unprecedented low imports from State Water Project. Pure Water Southern California expected to provide a drought-resilient water supply to 19 million people, which includes six million people living within disadvantaged communities and multiple Tribal communities.

### **Montecito Water District, Groundwater Augmentation Program**

**Reclamation Funding: \$1,000,000**

**Total Project Cost: \$2,656,058**

The Montecito Water District, located on the central coast of California, will advance its Groundwater Augmentation Program (GAP) through the preparation of the preliminary design report, completion of environmental compliance, and a feasibility study. GAP is an indirect potable reuse project that will include an advanced water purification facility at the existing wastewater treatment plant to produce purified recycled water. GAP also includes a pump station and pipelines to convey the recycled water to an injection well for groundwater recharge. Advancing the development of recycled water will allow the District to more effectively manage available water resources to improve water supply reliability, protect public health and safety, and reduce the risk of seawater intrusion in an area that has been affected by cyclical droughts, declining groundwater levels, and the reduced availability of surface water supplies.

### **Palmdale Water District, Pure Water Antelope Valley**

**Reclamation Funding: \$714,670**

**Total Project Cost: \$1,429,340**

The Palmdale Water District (District), located in Los Angeles County, California, will advance planning efforts for its Pure Water Antelope Valley project through investigating the use 5,325 acre-feet per year of recycled water from the Los Angeles County Sanitation District's Palmdale Water Reclamation Plant to augment potable water supplies. The tertiary wastewater will be treated to indirect potable standards and injected into the Antelope Valley Groundwater Basin for later beneficial use. The anticipated project will help resolve near-term water supply shortages, alleviate additional subsidence in the basin, and help address the uncertainty of future imported supplies due to climate change. The District's service area is a disadvantaged community with a median household income at 65 percent of the statewide median, and the community experiences multiple environmental justice burdens, including poverty, unemployment, housing, and climate risks. Project planning efforts will include developing a Title XVI Feasibility Study including, site surveying, geotechnical studies, preliminary design, environmental studies, regulatory compliance, and an evaluation of expanding the capacity of the District's advanced water purification facility.

### **Rancho California Water District, Regional Recycled Water and Groundwater Recharge Study**

**Reclamation Funding: \$1,000,000**

**Total Project Cost: \$2,467,232**

The Rancho California Water District, located in southern California, in partnership with other local water management agencies, is developing a feasibility study for a regional recycled water program. The feasibility study will explore options for expanding indirect potable reuse, including the construction of a larger brine disposal pipeline and new inland pipelines and interconnections to combine isolated infrastructure into a regional recycled water system. The region is heavily dependent on imported water, primarily from the Colorado River, and increased recycled water supplies will create additional, reliable local sources of water that can be accessed during severe drought conditions or other emergency situations when imported sources are not available or constrained. Once completed, the potential new project would eliminate the need to import up to 27,000 acre-feet of water annually.

### **San Bernardino Valley Municipal Water District, Bunker Hill Basin Regional Recycled Water Coalition Feasibility Study**

**Reclamation Funding: \$247,000**

**Total Project Cost: \$495,000**

The San Bernardino Valley Municipal Water District, located in southern California, will develop a new water recycling feasibility study to support a multi-agency indirect potable reuse project for treating recycled water to produce up to 25,000 acre-feet per year of new, local, drought resilient supplies. The study area relies heavily on imported surface water supplies which are limited and overallocated, resulting in curtailed deliveries. The reductions in water availability over recent years highlights the need for improved drought resilience and local water supply reliability. A coalition of water management agencies in the area will collaborate to develop the

study for the potential project, which will capture recycled water from regional wastewater flows and purify it at a new water recycling facility for groundwater recharge in the San Bernardino groundwater basin for later beneficial use.

### **Santa Clara Valley Water District, San Jose-Santa Clara Purified Water Program Feasibility Study**

**Reclamation Funding: \$381,249**

**Total Project Cost: \$1,524,996**

The Santa Clara Valley Water District (Valley Water), located near San Jose, California, will assess the feasibility of constructing a new advanced water purification facility in San Jose for potable reuse through groundwater recharge, raw water augmentation, and/or treated water augmentation. Valley Water relies primarily on imported and local surface water which are currently vulnerable to drought. Multiple, consecutive dry years, as seen by Valley Water in 2012-2016, depletes Valley Water's main water supplies. As a result, Valley Water has had to rely on water use reductions and emergency water transfers/purchases to mitigate drought risks that will only worsen as drought conditions persist. The planned advanced water purification facility is expected to provide about 24,000 acre-feet of drought resistant recycled water annually, thereby reducing demand on imported water and improving the resiliency of the water supply. Funding will be used to develop a feasibility study that meets requirements for Reclamation's Large-Scale Water Recycling Program.

### **Santa Clara Valley Water District, South County Water Reuse Program Feasibility Study**

**Reclamation Funding: \$299,180**

**Total Project Cost: \$598,360**

The Santa Clara Valley Water District (Valley Water) will assess the feasibility of implementing several treatment and pipeline reuse projects that were identified in the County Recycled Water Master Plan. Valley Water faces water supply challenges and is investigating ways to increase the use of locally sourced, reliable, sustainable, and efficient water supplies such as water reuse. The study will identify and evaluate project alternatives through varying analyses including geotechnical review, hydraulic analysis, and the development of cost estimates. If determined to be feasible, the reuse projects identified through this study, once implemented, will help expand the use of recycled water, reducing the reliance on groundwater in the region, thereby promoting the long-term sustainability of the local groundwater basin.

### **Town of Windsor, Reclaimed Water Expanded Use Feasibility Study**

**Reclamation Funding: \$249,866**

**Total Project Cost: \$499,731**

The Town of Windsor (Town), located in northern California, will develop a feasibility study that meets Title XVI program requirements to support the expansion of reclaimed water use. The expansion will include infrastructure to produce tertiary-treated recycled water for beneficial reuse, increasing the Town's capacity to generate and store recycled water. It is estimated that the increased capacity will make approximately 1,000 additional acre-feet of recycled water available each year. The Town depends almost entirely on water supplies from the Russian River.

Increasing available recycled water will offset the need to divert an equivalent amount of surface water from the Russian River that is rain-fed and extremely vulnerable to abnormally dry conditions and drought.

### **Valley Sanitary District, Recycled Water Treatment Project**

**Reclamation Funding: \$280,439**

**Total Project Cost: \$560,878**

The Valley Sanitary District (District), located in Riverside County, California, is advancing project planning to implement upgrades to its water reclamation facility for tertiary treatment for non-potable reuse and potable reuse via recharge of the Coachella Valley Groundwater Basin. The project being considered will use wastewater to produce high-quality water that is suitable for groundwater recharge and irrigation. The recycled water will provide the District with an alternative source of water that is more reliable, sustainable, and more resilient to the impacts of climate change and drought. Funding will allow the District to pursue additional investigations and planning necessary to complete a feasibility study that meets Title XVI program requirements.

### **Western Municipal Water District, Recharging Recycled Water and Groundwater Desalter Expansion Feasibility Study**

**Reclamation Funding: \$200,000**

**Total Project Cost: \$400,000**

The Western Municipal Water District, located in Riverside County, California, will prepare a feasibility study to investigate opportunities to increase the amount of existing recycled water supplies that can be used for groundwater recharge and later beneficial use as well as the feasibility of expanding its existing desalter. Projects under consideration will advance the production of local water supplies while maintaining the sustainability of the groundwater basin in an area that is heavily dependent on imported water supplies from the State Water Project and the Colorado River. Approximately 40 percent of the population that will directly benefit from more sustainable groundwater supplies earn below 80 percent of the statewide annual household median income. The projects being investigated were identified as mitigation actions in a regional Drought Contingency Plan that was funded through Reclamation's WaterSMART Drought Response Program. Funding will be used for groundwater modeling, water quality testing, engineering reporting, and development of a final feasibility study to meet the requirements of Reclamation's Title XVI Water Reclamation and Reuse Program.

## **Idaho**

### **City of Boise, City of Boise Recycled Water Program**

**Reclamation Funding: \$1,000,000**

**Total Project Cost: \$3,223,043**

The City of Boise, Idaho will develop a feasibility study as well as other planning, preliminary design, and environmental compliance activities for the City of Boise Recycled Water Program. The planning activities will inform site selection and project development for a recycled water facility, a groundwater recharge facility, and related recycled water conveyance infrastructure.



The proposed recycled water facility is expected to treat up to five million gallons of used industrial water per day for groundwater recharge that will be stored for later beneficial use. The Recycled Water Program is expected to increase groundwater supplies and address groundwater depletion concerns via storage in an area that relies primarily on groundwater. Once developed, the Recycled Water Program will benefit underserved and low-income communities in Boise through increased water supply resiliency.

## **Nevada**

### **Southern Nevada Water Authority, Boulder City Wastewater Recycling: Research, Planning, & Feasibility Study**

**Reclamation Funding: \$1,000,000**

**Total Project Cost: \$2,660,000**

The Southern Nevada Water Authority is evaluating options to expand water reuse by designing a recycling system for Boulder City's (City) wastewater, which would contribute over 800 acre-feet annually to direct or indirect reuse. Most wastewater in the Las Vegas Valley is highly treated by a local reclamation facility and discharged into the Las Vegas Wash for return to Lake Mead. Boulder City water users are connected to municipal sewer, but because of City's location relative to Lake Mead, the City does not currently have a way to return its flows to Lake Mead for return flow credits and does not have an existing wastewater reuse system to extend water supplies. Establishing reuse will allow the City to maximize water resources and stretch its Colorado River allocation. Funding will be used to support the development of wastewater recycling projects through initial planning and design activities including cost estimates, data collection, and a feasibility study to meet Title XVI program requirements.

## **New Mexico**

### **State of New Mexico, Brackish Groundwater Desalination to Increase Water Supply Resiliency and Reliability in the Lower Rio Grande Valley Region of New Mexico**

**Reclamation Funding: \$300,000**

**Total Project Cost: \$600,000**

The State of New Mexico will evaluate the feasibility of desalination of brackish groundwater from the Salt Basin and investigate brackish groundwater availability in southern New Mexico. Planning efforts will include evaluating brackish groundwater aquifers, with a primary focus on aquifers located in the southern portion of the State nearest to desalinated water delivery points that are being evaluated in the Lower Rio Grande area. The Lower Rio Grande area of New Mexico is affected by water stress, growth in water demand, aridification, and regional conflicts associated with limited resources. The potential desalination project would develop a climate resilient water source and narrow estimated water supply shortages for the Lower Rio Grande Planning Region by a range of 20,000 – 40,000 acre-feet annually.

## Texas

### **Canadian River Municipal Water Authority, Canadian River and Lake Meredith Water Supply Desalination Feasibility Studies**

**Reclamation Funding: \$1,000,000**

**Total Project Cost: \$2,000,000**

The Canadian River Municipal Water Authority, located in northern Texas, will develop feasibility studies for two different projects as part of its strategy to improve salinity management in Lake Meredith and to meet water demands for its member agencies in the Texas Panhandle and South Plains. The studies will investigate and evaluate options for Phase II of its Salinity Control Project in New Mexico and for a proposed desalination facility near Lake Meredith. Lack of rainfall in the Canadian River area and the subsequent reduction of inflow to Lake Meredith has reduced available drinking water supplies for cities in the Texas Panhandle. Low inflows into Lake Meredith and prolific salt sources upstream have resulted a chloride concentration that is currently more than three times higher than the Federal secondary drinking water standard, which limits the amount of water that can be delivered to the region. Salinity is currently managed through an existing salinity control project that blends the water with groundwater. The new desalination feasibility studies will evaluate alternatives to address the chloride issues and produce additional water supplies. Advancing desalination in the area will also reduce the amount of water needed from the Ogalala Aquifer, which is at risk for overextraction and pollution since withdrawal rates exceed recharge rates.

### **City of San Marcos, City of San Marcos Recycled Water Feasibility & Master Plan**

**Reclamation Funding: \$250,000**

**Total Project Cost: \$500,000**

The City of San Marcos (City), located near Austin, Texas, will develop a feasibility that meets Title XVI program requirements to identify cost-effective drought resilient projects for potential potable and non-potable recycled water. The study will determine the feasibility of expanding the City's existing reclaimed water system, capturing an estimated 4,000 acre-foot per year of water currently discharged from the City's wastewater treatment plant to the San Marcos River. The Study will provide a roadmap for future reclaimed water efforts and include a prioritized list of projects for construction to build upon the City's ongoing efforts to expand water reuse as an alternative water supply, maintain water levels in the protected Edwards Aquifer through decreasing withdrawals, and preserve critical habitat in the San Marcos River.

### **El Paso Water Utilities Public Service Board, Upper Valley Water Treatment Plant Reuse Study**

**Reclamation Funding: \$1,000,000**

**Total Project Cost: \$2,000,000**

El Paso Water Utilities Public Service Board (EPWater) will undertake a feasibility study to investigate water reuse solutions to meet growing water supply demands, adjust groundwater use to limit impacts to river flows in the Rio Grande, and alleviate pressure on sewer pipelines to reduce the risk of a sewer line spill into the Rio Grande. EPWater will conduct an alternatives analysis, preliminary design, and environmental impact studies to support the recycled water

project development. The study will examine the viability of diverting wastewater flow from a series of lift stations that feed into a large-diameter sewer line and treating that water to potable standards. All project alternatives being considered will be designed to provide at least four to seven million gallons of potable water per day. The planned project will serve economically disadvantaged communities in El Paso County, where an estimated 20 percent of individuals live below the poverty threshold, as defined by the U.S. Census Bureau.

### **Gulf Coast Water Authority, Gulf Coast Water Authority Regional Seawater Desalination Feasibility Study**

**Reclamation Funding: \$365,500**

**Total Project Cost: \$731,000**

The Gulf Coast Water Authority (Authority), located near Houston, Texas, aims to ensure a drought-proof water supply portfolio that contributes efficiently to the region's resilience against climate change driven droughts. Therefore, the Authority will assess the feasibility of implementing a seawater desalination project. The Authority provides water to municipal, industrial, and irrigation users, and in river basins relevant to the Authority's service area, there is an estimated supply deficit of 228,305 acre-feet per year by 2070. The study will begin with a stakeholder process to gauge regional interest and receive input pertaining to seawater desalination. The Authority is considering a production capacity of approximately 40 million gallons per day, but modeling of the existing water supply portfolio will be performed as a part of the study to determine the appropriate volume of seawater desalination and the potential regional impact that the new water supply would have when conjunctively managed with existing surface water resources. The study will also include the selection of a site for the desalination plant, selection of competing water supply alternatives, and preparation of a report addressing Title XVI feasibility study requirements.

### **Laguna Madre Water District, Port Isabel Seawater Desalination Treatment Facility**

**Reclamation Funding: \$490,000**

**Total Project Cost: \$986,750**

The Laguna Madre Water District (District), located in southern Texas, will develop a feasibility study for a potential seawater desalination water treatment facility in the City of Port Isabel, Texas. The District faces multiple water challenges including the Rio Grande being its sole source of water supply, the variability of available water during drought, and the proximity to the Gulf of Mexico with hurricanes being the most frequent natural hazard affecting the area and water supplies. Local concerns demonstrate a critical need for the District to diversify its water supply portfolio to ensure water resiliency and continued water deliveries to its customers. The study will advance the District's efforts to develop seawater desalination by assessing the feasibility of a 3 million gallons per day treatment facility, with the capability to expand to 5 million gallons per day, to augment current water supplies and meet peak seasonal demands. Funding will be used for planning activities such as conducting a raw water source characterization, preliminary design, and an assessment of environmental compliance and regulatory activities required to pursue the future design and construction of the facility.

## Utah

### **City of South Jordan, City of South Jordan Water Reuse Feasibility Study, Environmental Compliance, and Pre-Design**

**Reclamation Funding: \$743,904**

**Total Project Cost: \$1,487,808**

The City of South Jordan (City), located near Salt Lake City, Utah, will complete planning activities to develop a potential 30 million gallons per day capacity full-scale direct potable reuse project. The potential project will include a membrane bioreactor treatment plant that incorporates biological phosphorus and nitrogen removal and micro-filtration, and ultra-violet disinfection to provide highly purified recycled water that exceeds the City's drinking water standards for direct delivery to the City's distribution system. Climate change has impacted the regional water supply with a shift to an earlier and reduced runoff volume, threatening the City's ability to meet summer demands. Water reuse has been identified by the City as a drought resilient water supply to help meet demands during future droughts. Current project planning activities will include developing a feasibility study that meets Title XVI program requirements, preparing preliminary cost estimates, developing and evaluating project alternatives, assessing environmental and cultural resources compliance needs, and preparing pre-design for the recommended alternative.

### **Washington County Water Conservancy District, Washington County Regional Reuse System: Planning**

**Reclamation Funding: \$1,352,638**

**Total Project Cost: \$5,410,533**

The Washington County Water Conservancy District (District), located in southwest Utah, is planning the Washington County Regional Reuse System to maximize local reliable water supplies that are under increasing pressure from climate change and growth within the District's service area. The Regional Reuse System will integrate recycled water into the District's water supply portfolio for potable and secondary irrigation purposes. The Regional Reuse System is expected to provide 47,000 acre-feet of recycled water annually by 2050 through the construction of multiple water treatment facilities, pipelines, and storage reservoirs. Planning will include design data studies, environmental and cultural studies, preliminary design, cost estimating, and initiation of environmental compliance and permitting. This large-scale Regional Reuse System will reduce the urgency and magnitude for new imported water supplies from the Colorado River.