BUREAU OF RECLAMATION

# 2022 Drought Resiliency Projects – Phase 2 Selections

## California

### Turlock Irrigation District, Ceres Main Regulating Reservoir Project

**Reclamation Funding: $2,000,000** **Total Project Cost: $8,723,332**

The Turlock Irrigation District (TID), located in the Central San Joaquin Valley of California, will construct a 38-acre concrete-lined regulating reservoir to serve as a surface water regulation and storage facility. The project will capture operational spills from fluctuations in delivery canals during periods when supply exceeds demand. The captured flows will be returned to canals during times of water shortages. The project will help to achieve drought resiliency through improved water management of 10,000 acre-feet per year. TID is located in an area prone to multi-year droughts and is currently experiencing extreme drought conditions. This project will also reduce groundwater pumping, increase operational flexibility, and provide water supply reliability for TID customers. The project is consistent with TID's 2020 Agricultural Water Management Plan and Drought Management Plan.

### North Kern Water Storage District, 2022 Return Capacity Improvement

**Reclamation Funding: $2,000,000** **Total Project Cost: $4,142,484**

North Kern Water Storage District (NKWSD), located in Bakersfield, California, currently operates a groundwater banking program whereby the District actively participates in groundwater recharge and storage through the use of spreading ponds and in-lieu recharge activities. To better manage and improve access to previously stored water, the District will construct the Return Capacity Improvements Project consisting of three wells and associated pipelines to integrate the wells into the existing conveyance network. The project will increase water supply reliability and add drought resiliency to the region. NKWSD estimates on average that this project will recover 3,689 acre-feet of previously banked water per year. Of this amount, 1,845 acre-feet will be reserved for in-district use and 3,689 acre-feet will be allocated to neighboring districts. This project is supported by the Poso Creek Integrated Regional Water Management Group's Drought Contingency Plan (DCP). The DCP is being developed with assistance from a WaterSMART Drought Contingency Planning grant.

### Carmichael Water District, Aquifer Storage and Recovery Well at Engle/Garfield

**Reclamation Funding: $2,000,000** **Total Project Cost: $5,000,000**

The Carmichael Water District (District), located in Sacramento County, California, will construct a new aquifer storage and recovery well (ASR well) to enhance the District's current conjunctive use program. The District currently participates in a groundwater banking program and has banked over 50,000 acre-feet in the Sacramento Valley Groundwater Basin. The ASR well will provide an average annual benefit of 605 acre-feet per year of additional recharge and allow access to previously banked water, providing up to 1,210 acre-feet for use in drought years while alleviating demand on the stressed American River. The ASR well will greatly enhance the District's ability to sustainably manage its groundwater supplies and better manage its previously banked water to provide drought resiliency and operational flexibility. The project supports goals identified in the District's 2020 Urban Water Management Plan to help build long-term resilience to drought and reduce the need for emergency response actions. Implementation of this project is also identified as a mitigation action in the North American Basin Regional Drought Contingency Plan (DCP) that was developed with assistance from a WaterSMART Drought Contingency Planning grant.

### Santa Clarita Valley Water Agency, Rosedale Phase 2 Wells Project

**Reclamation Funding: $1,458,987** **Total Project Cost: $2,917,974**

The Santa Clarita Valley Water Agency (SCVWA), located in Los Angeles County, California, will construct two wells in the Kern County subbasin for the recovery of 5,000 acre-feet per year of previously banked water in Rosedale Rio Bravo Water Storage District (District). Over the past 14 years, SCVWA has banked approximately 120,000 acre-feet with the District. Los Angeles County is currently experiencing extreme to exceptional drought conditions and faces uncertainty in surface water supply reliability. These wells will serve as a drought resilience measure, allowing the agency to access banked water during times of drought. This project aligns with goals of SCVWA's 2020 Urban Water Management Plan and SCVWA's 2020 Water Shortage Contingency Plan.

### City of Santa Ana, Well 38 Water Treatment Project

**Reclamation Funding: $2,000,000** **Total Project Cost: $5,432,333**

The City of Santa Ana (City), located in southern California, will construct a new ion exchange water treatment facility at Well 38. The ion exchange treatment is commonly used for the removal of groundwater contaminants, such as nitrate and perchlorate, and consists of pressurized treatment vessels filled with polymer-based ion exchange resin that removes contaminants as water passes over it. This treatment will allow the City to utilize up to an additional 4,000 acre-feet per year of a reliable groundwater during dry conditions and when facing reduced allocations of imported surface water. The City is currently experiencing severe drought conditions, and this project is aligned with their 2020 Water Shortage Contingency Plan.

### Rosedale-Rio Bravo Water Storage District, Groundwater Banking Recovery Project

**Reclamation Funding: $2,000,000** **Total Project Cost: $4,342,862**

The Rosedale-Rio Bravo Water Storage District (District), located in the southern San Joaquin Valley of Kern County, California, operates an expansive groundwater recharge and banking program that utilizes over 2,000 acres of recharge basins for direct recharge or surface water supplies and in-lieu banking activities. This project will expand the District's groundwater banking and recovery efforts by constructing three extraction wells and necessary conveyance facilities at existing recharge basins for the recovery and distribution of previously stored water. With continued severe drought conditions in the area, the District and its groundwater banking partners increasingly face surface water reductions. This groundwater banking recovery project will provide an average annual water supply of 3,258 acre-feet, providing drought resiliency for the District and its banking partners. The project is supported by the District's Comprehensive Groundwater Sustainability Plan.

## Nevada

### Las Vegas Valley Water District, Drought Resiliency Through Additional Well Capacity

**Reclamation Funding: $732,684** **Total Project Cost: $1,526,425**

The Las Vegas Valley Water District (LVVWD), located in southern Nevada, will construct a new well at their Fort Apache Reservoir site, adding up to 4,000 acre-feet annually to its water supply. Las Vegas Valley's groundwater is a perennial supply that is replenished each year by natural recharge in the surrounding mountains and is a critical component of southern Nevada's water resources. Groundwater helps meet peak demands and provides resilience for the community's water supply as the groundwater is less susceptible to drought impacts than Colorado River resources. The new well will allow LVVWD to access a portion of its groundwater rights and water stored in the Southern Nevada Water Bank which stores surface water through the use of injection wells. Las Vegas is currently experiencing a severe and extended drought. This additional well will provide system flexibility during drought conditions and other system outages. The project is supported by Southern Nevada Water Authority's Water Resource Plan and Joint Conservation Plan.

## Texas

### City of McAllen, McAllen Public Utility's Reuse Water Enhancement Project

**Reclamation Funding: $1,327,305** **Total Project Cost: $2,851,203**

City of McAllen (City), located in southern Texas, will expand its reclaimed water system by installing a one-million-gallon elevated reuse water storage tank to utilize recycled water as an alternate source for landscape irrigation. The project will provide an additional water supply of 1,120 acre-feet per year and reduce the demand on potable water supplies from the Rio Grande River. A 2015 Reuse Master Plan references the need of a storage tank for a reliable water reuse system. The additional 1,120 acre-feet per year provides a drought-resilient water supply to a community that is prone to extreme droughts.

## Utah

### Syracuse City Corporation, 2700 Secondary Water Reservoir and Water Pump Station Project

**Reclamation Funding: $2,000,000** **Total Project Cost: $6,841,000**

Syracuse City Corporation (City), located in Syracuse, Utah, north of Salt Lake City, will build a concrete-lined reservoir, pump station, and associated pipelines to connect the reservoir to an existing conveyance system. The project will allow the City to store an additional 37 acre-feet, increasing storage capacity by 51%. The City will store water in times of high flows to be used as additional supplies for later, beneficial use. Located in the Weber River Basin, the City has experienced substantial impact on water supply reliability due to extreme drought conditions. The increased storage provides a drought resilient supply. This project is supported as a mitigation action in the Weber Basin Water Conservancy District's Drought Contingency Plan (DCP) that was developed with assistance from a WaterSMART Drought Contingency Planning grant.

### Draper Irrigation Company (WaterPro), Shallow Groundwater Wells and Pipeline

**Reclamation Funding: $2,000,000** **Total Project Cost: $8,231,174**

The Draper Irrigation Company (Company), located in Draper, Utah, provides both irrigation and culinary water to its customers that is supplied with water shares from the Jordan River and Utah Lake. Irrigation water quality is degraded and as a result, customers are using treated culinary water to meet irrigation needs. To shift irrigation demands from treated culinary water, the Company will install four shallow groundwater wells and approximately 7,100 feet of conveyance pipe near the Jordan Basin Water Reclamation Facility in Salt Lake County, Utah. This project will provide approximately 2,992 acre-feet per year of a clean and consistent supply of secondary water for irrigation and allow surface water conservation in Utah Lake to benefit the endangered June Sucker and critical municipal supplies. This project is supported by neighboring districts and approved by the State Department of Natural Resources. The Company participated in the development of a regional drought contingency plan (DCP) completed by Jordan Valley Water Conservancy District that lists new shallow groundwater wells as drought mitigation actions. The DCP was developed with assistance from a WaterSMART Drought Contingency Planning grant.