Large-Scale Water Recycling Project Selections – May 2024

California

Los Angeles Department of Water & Power, The Los Angeles Groundwater Replenishment Project, Reclamation Funding: $30,000,000

Los Angeles Department of Water and Power is partnering with Los Angeles Sanitation and Environment to design and construct the Los Angeles Groundwater Replenishment Project. The project will produce purified recycled water by diverting tertiary effluent from the Donald C. Tillman Water Reclamation Plant to a new advanced water purification facility using microfiltration, reverse osmosis, and an ultraviolet advanced oxidation process. The purified water will then be delivered to the Hansen Spreading Grounds to replenish the San Fernando Groundwater Basin. The project once constructed will reduce dependence on imported water by delivering 20,600 acre-feet per year of recycled water, establishing a new local, and drought tolerant water supply. Funding will be used to complete final design and construction of improvements at the tertiary treatment facility and the advanced water purification facility.

Metropolitan Water District of Southern California, Large Scale Water Recycling Planning and Design for Pure Water Southern California, Reclamation Funding: $99,199,096

The Metropolitan Water District of Southern California (Metropolitan), in partnership with the Los Angeles County Sanitation Districts (LACSD), is developing a large-scale, regional, recycled water project to create new reliable and drought resilient water supply and mitigate against climate change and competing water demands. Upon completion, Phase 1 of Pure Water Southern California Program (Program) is expected to deliver 115 million gallons per day (MGD) or 118,590 acre-feet of recycled water annually though treatment and beneficial reuse of unused effluent from LACSD’s largest, 400 MGD, wastewater treatment plant (Warren Facility). Metropolitan imports 50 percent of its potable water demand from the Colorado River and State Water Project. The recycled water produced by the Program will allow Metropolitan to reduce its reliance on imported water thus sustaining the regional supply by collaborating with neighboring states through partnerships and exchanges for Colorado River water. The project will increase local water supplies through the treatment of effluent using an advanced treatment train that includes a membrane bioreactor, reverse osmosis, and an advanced oxidation process. After treatment, the water will be conveyed through 44 miles of pipeline to groundwater
recharge facilities in three basins and to direct potable reuse (DPR) treatment facilities. Funding will be used to advance the design of treatment improvements at the Warren Facility, the advanced water purification facility, and the conveyance system. Other planning activities expected to be completed with the funding include environmental planning, pilot testing to select the preferred DPR treatment technology, and inter-agency coordination.

City of San Buenaventura, Ventura Water Pure Program, Reclamation Funding: $30,000,000

The City of San Buenaventura will construct treatment and conveyance facilities to produce up to 3,600 acre-feet per year of local recycled water to meet projected potable water demands. The City depends on a limited portfolio of local water supplies, and the surface water sources that make up nearly half of the City’s supplies are often significantly reduced during periods of drought. The Ventura Water Pure Program will help the City become less vulnerable to drought conditions by creating a new source of local, drought-resistant recycled water supply. The project will divert tertiary-treated effluent from the Ventura Water Reclamation Facility, currently being discharged to the Santa Clara River Estuary, to a new advanced water purification facility to produce recycled water that meets or exceeds the state requirements for potable reuse. Funding will be used to design and construct the advanced water purification facility, membrane bioreactor and ultraviolet disinfection, ocean outfall, and pipeline and well facilities.

Utah

Washington County Water Conservancy District, Washington County Regional Reuse System, Reclamation Funding: $20,539,640

The Washington County Water Conservancy District, in partnership with the City of St. George and the Ash Creek Special Service District, is developing the Washington County Regional Reuse System to help meet water demand for the area’s expanding economy and growing population by integrating potable and non-potable irrigation reuse into Washington County’s water supply portfolio. The Regional Reuse System once completed is expected to provide up to 40,000 acre-feet of annual recycled water supply by 2070, which will help maximize local reliable water supplies that are under increasing pressure from climate change and economic growth. The Regional Reuse System comprises multiple reuse components and phases of treatment, conveyance, and storage projects. Treatment components include upgrades and expansion of the St. George Reuse facility and the Ash Creek water treatment plant. Conveyance and storage project components include reuse forebay and desilting facility, approximately 83 miles of pipeline, a 1,500 acre-feet secondary irrigation reservoir, and a 55,000 acre-feet of secondary irrigation reuse water storage. Funding will be used to undertake planning, design, and construction activities for multiple components of the project.