

## **Title XVI Feasibility Study Funding - FY 2017**

### **California**

#### **Pure Water Soquel - Replenishing Mid-County Groundwater with Groundwater with Purified Recycled Water**

**Soquel Creek Water District**

**Federal Funding: \$150,000**

**Non-Federal Funding: \$303,000**

The Soquel Creek Water District provides potable drinking water and groundwater resource management within its service area in the mid-region of Santa Cruz County. The District obtains 100 percent of its water supply from groundwater aquifers within the Santa Cruz Mid-County Groundwater Basin. This feasibility study will evaluate the feasibility of recharging purified recycled water into the local groundwater aquifer.

#### **Pure Water Project Las Virgenes Municipal Water District**

**Las Virgenes Municipal Water District**

**Federal Funding: \$150,000**

**Non-Federal Funding: \$166,292**

The Las Virgenes Municipal Water District in partnership with the Triunfo Sanitation District, is conducting a feasibility study for an indirect potable reuse project that would produce up to 5,151 acre-feet per year of new, local drought-resilient water supplies for the northern Los Angeles and Ventura areas. The project would enable the district to capture all of its unused recycled water available during winter low irrigation demand season, purifying it at a new advanced water treatment plant, and augmenting imported drinking water supplies stored at its existing Las Virgenes Reservoir.

#### **Lower Moosa Canyon Wastewater Recycling, Reuse, and Sub-regional Brine Disposal Project**

**Valley Center Municipal Water District**

**Federal Funding: \$150,000**

**Non-Federal Funding: \$170,000**

Valley Center Municipal Water District in Valley Center, San Diego County, California, is studying the feasibility of various options for re-using the effluent from its Lower Moosa Canyon Water Reclamation Facility, as well as options for developing a brine disposal pipeline to serve surrounding agencies. District staff will develop community outreach approaches necessary to promote public acceptance and implementation of viable alternatives.

### **Kansas**

#### **Strategic Plan for Reuse of Effluent Water Resources in Garden City, Kansas and Vicinity**

**City of Garden City, Kansas**

**Federal Funding: \$65,368**

**Non-Federal Funding: \$65,368**

Garden City, Kansas, located within Finney County in arid southwest Kansas, will evaluate the feasibility of utilizing effluent from a large milk drying facility for various industrial, commercial, or agricultural reuse purposes as a means to help offset demands on the depleted Ogallala Aquifer.

## **Nevada**

### **Northern Nevada Indirect Potable Reuse Feasibility Study**

#### **Washoe County**

**Federal Funding: \$150,000**

**Non-Federal Funding: \$150,000**

The Washoe County Community Services Department with eight public agencies is jointly conducting a feasibility study to evaluate whether the State of Nevada's newly adopted "A+" reclaimed water category offers significant water resource management benefits including improving efficiency, providing flexibility during periods of water scarcity, and diversifying the region's water supply portfolio.

## **Oklahoma**

### **Feasibility Study to Augment Bartlesville Water Supply with Drought-Resilient Reclaimed Water**

#### **City of Bartlesville**

**Federal Funding: \$150,000**

**Non-Federal Funding: \$271,029**

The City of Bartlesville in northern Oklahoma will investigate the environmental, technical, and cost variables associated with conveying a portion of the City's treated effluent to a point upstream of the City's water treatment plant, where it would be blended with river water to stabilize flows, improve drought resiliency, and extend water supplies by up to 25 years. The study will include stakeholder and public outreach, engineering, and detailed water quality modeling in coordination with state permitting agencies.

### **Feasibility Study of Potential Impacts of Select Alternative Produced Water Management and Reuse Scenarios**

#### **Oklahoma Water Resources Board**

**Federal Funding: \$150,000**

**Non-Federal Funding: \$150,000**

The Oklahoma Water Resources Board will evaluate opportunities to treat and reuse produced water from oil and gas operations to help reduce seismicity issues and offset water demands associated with hydraulic fracturing. Based on recommendations from the state-appointed Produced Water Working Group, the study will examine the technical, economic, and environmental factors associated with various produced water management and reuse scenarios, and will evaluate how those scenarios may reduce demands on the limited water supplies across the state.

### **Reuse Feasibility Study for the City Ada, OK**

#### **City of Ada Public Works Authority**

**Federal Funding: \$136,193**

**Non-Federal Funding: \$136,193**

The City of Ada, Oklahoma is located in Pontotoc County in South Central Oklahoma and is the headquarters of the Chickasaw Nation. This study will assess the potential for recycled water development to offset potable water demands on the sole-source Arbuckle Simpson Aquifer, while reducing negative water quality impacts in receiving streams within tribal territory.

## Texas

### **Feasibility Study of Energy-Efficient Alternatives for Brackish Groundwater Desalination for the North Alamo Water Supply Corporation**

**North Alamo Water Supply Corporation**

**Federal Funding: \$90,000**

**Non-Federal Funding: \$90,000**

The North Alamo Water Supply Corporation, a water purveyor in the Lower Rio Grande Valley, Texas, will examine energy use at multiple existing brackish groundwater desalination facilities into determine the feasibility of implementing cost effective energy-efficiency improvements, such as converting from reverse osmosis to nanofiltration treatment options. This study will review benefits and costs, along with the applicability of scaling the approach to help inform future desalination plants contemplated in across the region.

### **Aquifer Storage-Recovery (ASR) with Reclaimed Water to Preserve Hueco Bolson using Enhanced Arroyo Infiltration for Wetlands, and Secondarily Reducing Local Power Plant Reclaimed Water Demand**

**El Paso Water Utilities-Public Services Board**

**Federal Funding: \$150,000**

**Non-Federal Funding: \$180,000**

The El Paso Water Utility, in El Paso, Texas is evaluating a comprehensive Aquifer Storage and Recovery program using reclaimed wastewater that would be combined with available supplies with conserved reclaimed water from electrical generation for use to recharge the aquifer and contribute to future drinking water supplies. Sources of reclaimed water have the potential to increase the future available potable water supply by approximately 4,500 to 15,000 acre-feet per year.

## Utah

### **Weber Basin Water Conservancy District Reuse Feasibility Study**

**Weber Basin Water Conservancy District**

**Federal Funding: \$150,000**

**Non-Federal Funding: \$153,000**

The Weber Basin Water Conservancy District covers over 2,500 square miles in five counties in north central Utah: Davis, Weber, Morgan, Summit and part of Box Elder. As one of Utah's largest water districts it provides potable, secondary, and irrigation water to over 240,000 customers. The WBWCD Reuse Feasibility Study will allow the WBWCD to evaluate and collaborate with five wastewater treatment facilities within the District on ways to help develop greater resiliency and diversity of their water portfolio.

## Washington

### **Quincy 1 Water Resource Management Improvement Feasibility Study for Comprehensive wastewater reuse and water supply project**

**City of Quincy, Washington**

**Federal Funding: \$150,000**

**Non-Federal Funding: \$150,000**

The City of Quincy will complete a feasibility study to develop a plan to supplement and diversify its water supply, improve efficiency and provide flexibility during water short periods. The project will ultimately replace all wastewater disposal with reuse to create a virtual zero discharge system.

### **Feasibility Study for a comprehensive water reuse project at the Kitsap County Kingston Wastewater Treatment Plant**

**Kitsap County, Washington**

**Federal Funding: \$150,000**

**Non-Federal Funding: \$397,500**

The Kitsap County is conducting a feasibility study for a comprehensive water reuse project for the Kingston Wastewater Treatment Plant. The study will evaluate whether reclaimed water can be used during the summer to provide irrigation and provide infiltration during the wet months to enhance surface stream flow in Grovers Creek. This reclamation project will provide the growing community with a new source of clean water while promoting water and energy efficiency and environmental stewardship.