



Water Marketing Strategy Grants - 2019

Arizona

Quechan Indian Tribe, Voluntary Seasonal Fallowing Water Conservation Project

Reclamation Funding: \$54,089

Total Project Cost: \$108,178

The Quechan Indian Tribe of the Fort Yuma Reservation, in Yuma, Arizona, will develop a water marketing strategy to market up to 3,600 acre-feet per year of water to the Metropolitan Water District (MWD) in southern California. The strategy will focus on the use of financial incentives for farmers to voluntarily fallow irrigated lands during the driest time of the year which coincides with the period of highest water demand (typically Mid-April through Mid-August). The conserved water will be diverted by MWD through the Colorado River Aqueduct. The project will identify Reservation land best suited to be enrolled in a seasonal fallowing program, conduct economic analyses to assist in understanding the benefits and costs associated with seasonal fallowing, and develop a system for the Tribe to enroll land into the seasonal fallowing program. The project will benefit agricultural, municipal, and Tribal water users. The project is located within the Bureau of Reclamation owned Yuma Project Reservation Division (YPRD).

City of Phoenix, Central Arizona Water Clearinghouse

Reclamation Funding: \$200,000

Total Project Cost: \$642,680

The City of Phoenix, located in Maricopa County, Arizona, will partner with the City of Tucson and American Rivers to develop the Central Arizona Water Clearinghouse to facilitate future water market transactions, and maximize use of infrastructure and storage capacity to manage water shortages. The Clearinghouse will convene an advisory group made up of water users from different sectors, nonprofit organizations, tribal water managers, and state and Federal water managers, among others, to assist with broader outreach activities, conduct supply and demand and water marketing analyses, analyze potential legal constraints, and build partnerships. The Clearinghouse will provide a market platform and hub for water managers to access water supply information and guidance, and to pursue water marketing opportunities in the region. The Clearinghouse is supported by the Arizona Municipal Water Users Association, Kyl Center for Water Policy, the Environmental Defense Fund, Western Resources Advocates, the Walton Family Foundation, and the Audubon Society.

Colorado River Indian Tribes, Water Marketing Strategy for the Colorado River Indian Reservation

Reclamation Funding: \$184,250

Total Project Cost: \$395,140

The Colorado River Indian Tribes (CRIT), located on the borders of Arizona and California along the Colorado River, will develop a strategy to market water in both states, increasing regional water supply reliability while maintaining an agricultural economy on the reservation. The project includes conducting outreach to potential short-term, medium-length, or long-term buyers, conducting economic studies of water demand and transaction costs, analyzing potential legal constraints related to developing a water market across two states, and researching potential environmental, social, and cultural impacts of the water market. Project results include a water marketing strategy document that will serve as future guidance for the CRIT Tribal Council for proceeding with off-reservation water agreements, as well as increased collaboration with potential agricultural and municipal water partners in Arizona and California.

California

Mojave Water Agency, Mojave Water Agency Long-Term Water Management/Water Banking Program

Reclamation Funding: \$200,000

Total Project Cost: \$600,000

The Mojave Water Agency (MWA), located in San Bernardino County approximately 90 miles northeast of downtown Los Angeles, will build on prior efforts to develop a strategy for a large-scale groundwater banking program between multiple agencies to support water supply reliability in the region. MWA will engage with other State Water Project (SWP) contractors to complete a strategy to store SWP water within the Mojave region to facilitate conjunctive use, transfers and exchanges of water on a regional scale. The water marketing strategy will analyze any potential financial constraints, policy issues, and other environmental factors to assure the water marketing program is successful upon implementation. Project benefits include enhanced local water security, increased available storage of wet-year supplies otherwise lost to the ocean, stabilizing groundwater levels, and making water available for transfer within the region during times of shortage.

Tulare Irrigation District, Kaweah Sub-basin Water Marketing Strategy

Reclamation Funding: \$400,000

Total Project Cost: \$832,000

The Tulare Irrigation District, located in California's San Joaquin Valley, will develop a water marketing strategy to address an estimated 77,600 acre-feet per year overdraft in the Kaweah Groundwater Sub-basin. In coordination with three Groundwater Sustainability Agencies, and to comply with the Sustainable Groundwater Management Act, the project will provide groundwater resource flexibility for individual water users within the Kaweah Sub-basin by allowing for the redistribution of groundwater. Water users with excess groundwater will be able to trade their water with other water users who may be short on groundwater supplies to meet agricultural, municipal, and industrial demands. The District receives water from the Friant-Kern Canal as part of Reclamation's Central Valley Project.

Colorado

Colorado River Water Conservation District, Western Slope Demand Management Water Marketing Strategy Evaluation, Colorado

Reclamation Funding: \$315,721

Total Project Cost: \$677,065

The Colorado River Water Conservation District, located in Glenwood Springs, Colorado will develop a water marketing strategy for the Western Slope of Colorado to evaluate the risks of participating in demand management efforts in the Upper Colorado River Basin, and to develop market parameters and rules to mitigate those risks. This work will feed into the State of Colorado Demand Management work groups and subsequently into the Upper Colorado River Commission Demand Management planning efforts. Strategy development will include use of hydrologic modeling to evaluate basin-specific risks of different Colorado River Compact curtailment scenarios and water availability, and evaluation of associated economic, social and environmental risks to Western Slope communities. This project will bring together a diverse set of committed stakeholders, including the Colorado River District, Grand Valley Water Users Association, Uncompahgre Valley Water Users Association, Tri-State Generation, Colorado Water Conservation Board, and The Nature Conservancy, and other stakeholders engaged through outreach.

Kansas

City of Garden City, Water Marketing Strategy for Garden City, Kansas and Finney County, Kansas

Reclamation Funding: \$139,900

Total Project Cost: \$279,800

The municipality of Garden City, located in eastern Kansas, will develop a water marketing strategy to formally identify potential users of wastewater effluent and develop a rate structure for the purchase of the new supply. In 2017, Garden City completed a Title XVI Feasibility Study which evaluated four water reuse alternatives that could potentially be used to meet anticipated water shortages. Sources of reusable supplies identified include utilizing wastewater from a dairy-drying facility that produces up to 1 million gallons per day (MGD) of wastewater effluent, and a municipal wastewater treatment plant that produces up to 2.5 MGD of wastewater effluent that can be marketed to industrial, commercial, or agricultural users, and eventually be used for Aquifer Storage and Recovery (ASR). Creating a water market for these reusable supplies would decrease groundwater pumping in the Ogallala Aquifer, a critically over-drafted groundwater basin, by up to 6,000 acre-feet per year and provide Garden City with a reliable augmented water supply. Development of a water market for reusable water supplies was identified as a priority in the 2015 Upper Arkansas Regional Goal Action Plan.

Oregon

Harney County Court, Harney Basin Groundwater Marketing Development Evaluation **Reclamation Funding: \$50,000** **Total Project Cost: \$105,000**

The Harney Community-Based Water Planning (CBWP) Collaborative, in conjunction with the Harney County Court in Burns, Oregon, will develop a strategy for using market-based mechanisms to reduce groundwater overallocation in the Harney Basin, in the southeastern corner of Oregon. The goal of the strategy is to reduce groundwater use to address the estimated 110,000 acre-feet per year overallocation of groundwater through water marketing. The CBWP's water marketing strategy project will examine successful ground water markets, including accounting and management tools, evaluate compliance with Oregon water law, and assess different implementation options for a groundwater market that considers irrigation, domestic, municipal, and ecological needs. This project brings together farmers, ranchers, rural domestic and municipal water users, Burns-Paiute Tribe members and staff, The Nature Conservancy, and Federal, local, and state governments.

Texas

McLennan County, McLennan County Water Marketing Strategy Groundwater Replenishment Credits and Groundwater Augmentation Rate **Reclamation Funding: \$75,000** **Total Project Cost: \$157,500**

McLennan County, located in central Texas, will develop a water marketing strategy focused on conjunctive use of ground and surface water to stem groundwater depletions and stabilize water supplies in a five-city area. Implementation of the water marketing strategy will help meet the Groundwater Replenish Goal identified as a solution in the County's 2017 WaterSMART Drought Contingency and Water Supply Resiliency Plan. Through the development of the Primary Groundwater Replenishment Market (PGRM), the County will establish a new water market using surface water, reuse supplies, and other sources such as the Brazos River alluvium, to address an estimated 18,000 acre-feet per year shortfall in water supply. The strategy will evaluate the use of groundwater replenishment credits and groundwater augmentation rates to incentivize use of surface water and will include a variety of public workshops to receive public input at each stage of the project. The project will benefit multiple sectors in the region including rural and agricultural communities that rely heavily on groundwater.

Utah

Utah Division of Water Resources, Utah Statewide Water Marketing Development Strategy **Reclamation Funding: \$400,000** **Total Project Cost: \$838,252**

The Utah Division of Water Resources, headquartered in Salt Lake City, will build on ongoing efforts to develop a state-wide water marketing strategy that is voluntary, locally-driven, and facilitates temporary water transfers while maintaining low transaction costs. This project is supported by a group of over 50 participants initially formed in 2017 to address goals in the Statewide Water Strategy, including fulfilling instream flow needs, addressing growing municipal

needs and sustaining agricultural communities. The group developed draft water banking legislation to be considered in the 2020 legislative session. This water marketing strategy will be informed by three concurrent water marketing pilot projects in Utah, and will analyze the results from those pilots, conduct outreach to a broad range of stakeholders, and develop an approach for state-wide water marketing that includes a legal framework and monitoring of marketing activities. The strategy is supported by stakeholders representing agricultural, municipal, industrial, and environmental interests, and includes cost-share contributions from State agencies, the Central Utah Water Conservancy District, The Nature Conservancy, Trout Unlimited, the Audubon Society, and from the private sector.