

## Drought Contingency Planning Grants

### California

#### **East Bay Municipal Utility District, Bay Area Regional Reliability Drought Contingency Plan**

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

**Total Project Cost: \$496,004**

The East Bay Municipal Utility District will work together with other regional water management agencies within the Bay Area to develop a drought contingency plan to improve water supply reliability during times of shortage. By taking a regional approach to drought contingency planning, the agencies will be able to enhance water supply reliability, leverage existing infrastructure investments, facilitate water transfers during critical shortages, and improve climate change resiliency. The plan will cover nine counties surrounding the San Francisco Bay. Bay Area water agencies provide water to 6 million customers for municipal, industrial, and agricultural uses. Currently, the area is experiencing 'exceptional' drought, according to the U.S. Drought Monitor, and snowpack is at the lowest level in recorded history. Given the unprecedented supply shortages, curtailments have been issued. Reduced surface water supplies to municipal and agricultural water users increase competition for groundwater supplies, leading to increased salinity and impaired water quality.

#### **Elsinore Valley Municipal Water District, Drought Contingency Plan**

**Reclamation Funding: \$115,000**

**Total Project Cost: \$232,927**

Elsinore Valley Municipal Water District is located within the Santa Ana River Watershed in Southern California. The District serves a 96 square mile area in Riverside County along the eastern foothills of Santa Ana Mountains and serves a population of over 146,000. The District imports 65 percent of its water supply from the Colorado River and the State Water Project, making it vulnerable to drought related price increases. Groundwater, the District's second largest water source, is increasingly contaminated with arsenic due to overdraft. Current exceptional drought conditions affecting the District have exposed numerous risks in the geographic area including risks to water supplies, drinking water availability and quality, ecology, the environment, ranching, recreation and tourism, and the economy. Working together with several local municipalities and water purveyors, the District will build on existing planning efforts to develop a drought contingency plan that will systematically outline drought monitoring, perform a vulnerability assessment, identify mitigation actions, and provide a framework for response actions, and will encourage stakeholder involvement.

#### **Monterey Peninsula Water Management District, North Monterey County Drought Contingency Plan**

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

**Total Project Cost: \$470,318**

The Monterey Peninsula Water Management District will partner with several Monterey County agencies, districts, and government and non-governmental entities to prepare a drought contingency plan for the northern portion of Monterey County, California. The plan area is located on the California coast south of San Francisco and includes part of the Salinas Valley, the western portion of Carmel Valley, and the urbanized Monterey Peninsula. Major land uses include agriculture, rangeland, forest and urban development. Water supply is provided by surface and ground water sources as well as recycled water. The area has experienced severe

drought conditions for the past four years. Over-drafted groundwater aquifers and state-mandated reductions in pumping, in combination with the drought, have galvanized local stakeholders to jointly prepare a drought contingency plan. The development of a regional drought contingency plan will combine elements of local plans, add missing elements, and foster cooperative relationships among the stakeholders.

### **Placer County Water Agency, Regional Drought Contingency Plan**

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

**Total Project Cost: \$611,761**

Five large municipal and industrial water agencies with Central Valley Project water service contracts will collaborate in the development of a Regional Drought Contingency Plan covering northern Sacramento and western Placer Counties in northern California. Spearheaded by the Placer County Water Agency, the planning area covers approximately 550 square miles with 17 water suppliers serving a population of more than 1,000,000. The plan will incorporate climate information from the ongoing Sacramento-San Joaquin Basin Study, while focusing on municipal and industrial water supplies. Current drought conditions in California have revealed substantial risks to the public water supply system in the greater Sacramento region and the need to prepare a regional drought plan. The Agency will coordinate closely with Reclamation to develop the plan and is exploring the establishment of a water bank to increase use of available aquifer space in the basin.

## **Colorado**

### **Dolores Water Conservancy District, Dolores Project Drought Contingency Plan**

**Reclamation Funding: \$100,000**

**Total Project Cost: \$200,000**

The Dolores Water Conservancy District will develop a drought contingency plan in partnership with the Ute Mountain Ute Tribe Farm and Ranch Enterprise, and the Montezuma Valley Irrigation Company. The plan will include the areas served by the Bureau of Reclamation's Dolores Project, located in southwest Colorado, which provides irrigation water for approximately 36,600 acres of irrigated land, provides municipal and industrial water to the Ute Mountain Ute Tribe, the tribal community of Towaoc, several other towns and cities, and serves downstream fish and wildlife purposes. The Dolores Project suffered severe shortages (25%) from drought in 2013. The plan will include a comprehensive evaluation of mitigation and response actions to reduce water shortages and improve drought resiliency for water users through collaboration with local agricultural districts, tribal farmers, municipal and industrial users, non-governmental organizations, and Federal and state agencies.

## **Nevada**

### **Truckee Meadows Water Authority, Development of a Dynamic Drought Contingency Support Management System**

**Reclamation Funding: \$109,095**

**Total Project Cost: \$290,733**

The Truckee Meadows Water Authority, located in northern Nevada, will update its current Drought Contingency Plan to incorporate climate projections recently developed through a WaterSMART Basin Study and to specify mitigation actions to adapt to short-term changes in hydrologic conditions caused by drought. This update includes development and implementation of a decision support tool that will help water managers identify potential drought mitigation and

response actions. The Truckee River is the primary water source for several cities, is used by the largest industrial park in the United States, feeds agricultural production and livestock grazing, and is home to several endangered fish species. In the past 115 years, the area has experienced two eight-year droughts and several shorter multi-year droughts - the past four years have exceeded the worst drought on record. The Authority will update its plan by engaging stakeholders through established and successful stakeholder groups representing Federal, state, and local governmental organizations, tribes, agricultural producers, industries, and environmental and recreational interests.

## **Oklahoma**

### **Chickasaw and Choctaw Nations, Regional Drought Contingency Plan for the Arbuckle Simpson Aquifer Region**

**Reclamation Funding: \$187,081**

**Total Project Cost: \$387,442**

The Choctaw and Chickasaw Nations will prepare a Regional Drought Contingency Plan for their homeland in south-central Oklahoma. The Arbuckle Simpson Aquifer covers approximately 500 miles and is the principal source of water for more than 100,000 people, supplies water for mining and irrigation, and is the source for nearly 100 known springs that are culturally important and generate approximately \$100 million in tourism revenues per year. The area experienced an exceptional drought from 2010 until the spring 2015, causing significant economic hardship and requiring emergency actions, such as hauling water and drilling emergency wells. A wide range of regional stakeholders, representing numerous sectors will support the drought planning process. The plan will identify mitigation and response actions that can be implemented at the local and regional levels.

### **Foss Reservoir Master Conservancy District, Drought Contingency Plan**

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

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

The Foss Reservoir Master Conservancy District, with involvement of all sectors of water users, will develop and implement a drought contingency plan for west-central Oklahoma that focuses on the water supply needs of communities that rely upon the Foss Reservoir Master Conservancy District, a Bureau of Reclamation project. Reclamation's Foss and Fort Cobb Reservoirs provide 90-percent of the surface water supplies for the region, including municipal water to 40,000 people and two power generation facilities. The Drought Contingency Plan will build on the existing Upper Washita Basin Study and evaluate several additional sources of water supply not evaluated in the Basin Study to address drought. The area is currently experiencing a five-year extended drought, with Foss Reservoir being declared "effectively out of water" last October. Recent climate studies predict future droughts will be longer-lasting and more severe.

## **Oregon**

### **Santiam Water Control District, North Santiam Watershed Drought Contingency Plan**

**Reclamation Funding: \$158,632**

**Total Project Cost: \$399,080**

The Santiam Water Control District will work with the Bureau of Reclamation to develop and implement a drought contingency plan covering approximately 766 square miles from the western slopes of the Cascade Mountains to the Willamette Valley in Oregon. The headwaters serving the area are currently experiencing a severe drought, with low snowpack. Approximately

75% of the land is publicly owned and used for timber, agriculture, recreation, fish and wildlife purposes, transportation corridor, and municipal and industrial purposes. The risks from drought include over 17,000 acres of agricultural land, forestry impacts, water quality, steelhead fisheries, and recreation at Detroit Lake Recreational Area. Stakeholders from Federal, Tribal, State, County, City, industrial, local, and non-governmental sectors will be actively involved in plan development. Many of these stakeholders are entirely reliant on the availability of water from the North Santiam River.

## **Texas**

### **McLennan County, McLennan County Drought Contingency and Water Supply Resiliency Plan**

**Reclamation Funding: \$75,000**

**Total Project Cost: \$150,000**

McLennan County, Texas, will prepare a regional drought contingency plan that will address drought impacts to the Trinity Aquifer, including intensified arsenic contamination in the aquifer and problems created by zebra mussels in certain surface waters. The County will partner with the McLennan County Water Resources Group (Group) to conduct the plan. The Group includes cities, water supply corporations, the Brazos River Authority, a groundwater conservation district, and local citizen and business interests. The Trinity Aquifer is the primary source of water for many of the towns and cities in the planning area, and also provides water for industrial, agricultural, manufacturing, and mining operations. Recent drought conditions have resulted in historically low water levels in the aquifer. As a result, pumping costs have increased, water supplies have declined, and the demand on surface sources has expanded. The drought plan will incorporate a “conjunctive use” approach to improve the efficient use of both groundwater and surface water sources.

## **Washington**

### **Washington State Department of Ecology, Update of State Drought Contingency Plan**

**Reclamation Funding: \$172,409**

**Total Project Cost: \$344,818**

The Washington State Department of Ecology will update their 2005 state-wide drought contingency plan. Snowpack conditions in Washington State reached record low conditions at more than 70 percent of the state’s SNOTEL sites this year and in March 2015, the state declared drought in the Olympic Mountains, the east slope of the Cascades, and the Walla Walla Basin. Statewide droughts between 2001 and 2005 indicate that the agricultural sector experienced significant economic impacts from drought, along with municipal suppliers, hydropower generators and the recreation industry. Salmon stocks, some of which are considered threatened and endangered, also suffered. The drought plan update will strengthen and supplement the existing plan by prioritizing specific drought response and mitigation actions, and by addressing recommendations made in a 2005 report to the legislature for improving the existing plan. Stakeholders from state agencies, federal agencies, Indian Tribes, public water purveyors, climate change research institutes and from the agricultural, fisheries, and hydropower sectors will be invited to participate in the update process.