

## Mid-Pacific Region ARRA Projects

The Mid-Pacific Region encompasses southern Oregon, western Nevada, and Northern and central California. The American Recovery and Reinvestment Act provided \$273.8 million within this region for projects to recover and stabilize the economy of the United States in a short time period.

ARRA funding projects within Reclamation's Mid-Pacific Region constructed approximately 6.1 miles of canals, conserved approximately 53.5 acres of wetlands and built a project that could treat up to 200,000 gallons of water a day.

Emergency Drought Relief was a major project undertaken in the Mid-Pacific Region where 29 projects used \$40.6 million to effectively mitigate the consequences of drought. Environmental and Ecosystem Restoration was the second category where activities helped restore fish runs and restored the river ecosystems.

### Emergency Drought Relief

To minimize losses and damages resulting from drought conditions, Reclamation used \$40.6 million to improve water accountability and powerplant efficiencies, fund endangered species act mitigation, pump groundwater to satisfy required water deliveries to wildlife refuges so water for municipal, industrial and agricultural water contractors would be available, provide critical water supplies to urban customers, small communities and tribes, increase water flow data, and improve monitoring of hydrologic conditions.

Projects funded include:

**Del Puerto Water District** received \$7.3 million to install 2.25 miles of temporary pipeline to pump water from an existing well into the Delta-Mendota Canal. They also drilled 23 test wells, installed and developed irrigation wells, and rehabilitated, repaired or modified eight irrigation wells.

**Gray Lodge/Pixley Wildlife Refuges** received \$5.2 million to develop wells for improved wildlife and wetlands habitat and to reduce overall water demands on the Central Valley Project.

**West Stanislaus Irrigation District** received \$5.2 million to rehabilitate three existing wells as well as rent temporary pumps, 330 feet of pipe, valves, flow meters and required fittings to pump water from the West Stanislaus Irrigation District into the Delta Mendota Canal.



Delta-Mendota Canal/California Aqueduct Intertie Project

### Meet Future Water Supply Needs

#### **Delta-Mendota Canal/California Aqueduct Intertie Project - \$17.5 million**

The Intertie, located in the San Joaquin Valley west of Tracy, Calif., is a federal-state water system improvement project that connects the federal Delta-Mendota Canal and the California Aqueduct by way of a pumping station and two 108-inch diameter pipes.

The Intertie increases flexibility for the combined operations of the Central Valley Project and the California State Water Project and allows operators to help fill the San Luis Reservoir earlier in the year by compensating for Delta-Mendota Canal conveyance constraints. On a long-term average, the Intertie is expected to provide an increase of 35,000 acre-feet in CVP deliveries.

### Environmental and Ecosystem Restoration

#### **Red Bluff Fish Passage - \$112.6 million**

This project replaced the Red Bluff Diversion Dam and improved fish passage conditions on the Sacramento River at Red Bluff, Calif. It included a 1,118 foot-long fish screen, intake channel, 2,000 cubic-feet-per-second capacity pumping plant and discharge conduit to divert water from the Sacramento River into the Tehama-Colusa and Corning canals. Work was complete in 2012.

The Red Bluff Diversion Dam formed Lake Red Bluff and diverted water to the canals by gravity. However, the diversion dam also created a barrier to migrating fish, some of which are listed under the Endangered Species Act. The pumping plant replaced the diversion dam and the gates were permanently placed in the open position for free migration of fish.

#### **Battle Creek Salmon and Steelhead Restoration Project - \$12.8 million**

The Battle Creek and Steelhead Restoration Project, located in Shasta and Tehama counties, 40 miles east of Red Bluff, California, is one of the largest, cold-water anadromous fish restoration projects in North America. A broad range of partners came together to increase threatened and endangered Chinook salmon and Central Valley steelhead trout population by restoring 48 miles of habitat while maintaining renewable energy production at the Battle Creek Hydroelectric Project owned by Pacific Gas and Electric Company.

Phase 1B included the reconstruction of a powerhouse tailrace and construction of a mile long bypass pipeline/chute to a canal, to prevent the mixing of Battle Creek's north and south fork waters.

In its entirety, the Battle Creek Restoration Project involves the removal of five diversion dams, the placement of screens and ladders on three other diversion dams, an increase to instream flows, a fish barrier weir (to protect a trout hatchery) and prevention of mixing of creek fork waters. To date, about 16 of the 48 miles of stream habitat have been restored.