RECLAMATION Managing Water in the West

## Battle Creek Salmon and Steelhead Restoration Project

The Battle Creek Salmon and Steelhead Restoration Project received \$12.8 million in American Recovery and Reinvestment Act funding. It is one of the largest cold-water anadromous fish restoration projects in North America and is located about 40 miles east of Red Bluff in Northern California.

The project is an effort of a broad partnership to increase threatened and endangered Chinook salmon and Central Valley steelhead trout by restoring about 48 miles of habitat - 42 miles in Battle Creek and another six miles in its tributaries - while maintaining renewable energy production at the Battle Creek Hydroelectric Project, which is owned and operated by Pacific Gas and Electric.

It involves the removal of five diversions dams, placement of screens and ladders on three other diversion dams, and increasing stream flows, all within Tehama and Shasta counties. To date, about 16 miles of stream habitat have been restored. The project is scheduled for completion in 2016/2017.

The Wildcat Diversion Dam was removed in 2010, which resulted in 15 miles of stream habitat being

restored for Chinook salmon and Central Valley steelhead trout. A mile long bypass and tailrace connector system was constructed in 2012 to prevent the mixing of North Fork Battle Creek waters. A fish barrier weir was constructed in 2013 to maintain 5 cubic-feet-per-second of instream flow in Battle Creek, restoring another mile of stream habitat.

In addition to the ARRA funding provided, the federal government has provided an additional \$32 million. Various state funds provided \$58.2 million and the Iron Mountain Mine Trustee Council added \$6.5 million. Pacific Gas and Electric has also forgone power revenues of about \$20 million.

Partnering with Reclamation on this project are the U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife, Pacific Gas and Electric, Iron Mountain Mine Trustee Council, California Wildlife Conservation Board, Benicia Bridge Mitigation Funds, Richmond San Rafael Bridge Mitigation, Delta Fish Agreement Amendments and The Packard Foundation.

