



Truckee River Fish Passage: Working with Diverse Interests on a Highly Modified System

Products	A publication on alternatives, benefits determination, and a scoring matrix for fish passage options for a suite of dams and diversions on the Truckee River.	
Benefits	The publication will give water and resource management personnel options and criteria for examining fish passage alternatives that recognize water uses, address the larger aquatic and riparian communities, and support broader ecosystem restoration goals.	
Issue	Southwest rivers have been heavily modified for agricultural irrigation, municipal water supplies, flood control, mining, and other purposes. The result has been regional and system-scale physical, hydrologic, and biological alteration causing often severe impacts to aquatic and riparian ecosystems and native fish populations, many of which are endemic to individual systems. As local, state, and national interests, including tribal governments, articulate their goals in restoration of populations and ecosystems, managers are challenged to recognize these interests, historic water rights, and the costs of large-scale habitat projects. In addition, these managers must document and score restoration benefits for debate, prioritization, and eventual selection and monitoring. Traditional fish passage projects have focused narrowly on moving single species, and often a single age cohort of the species, around or over a single structure, usually only in the upstream direction. Newer models of fish passage focus more broadly on behavioral characteristics, life histories, and guild or community needs as well as “naturalized”, bidirectional, and often nonstructural techniques.	
Description	This project has identified a wide range of options to provide multispecies and multiage class movement past 18 structures, usually with irrigation diversions, on the main stem Truckee River. Two of the species, Lahontan cutthroat trout and cui-ui, are endangered. Working with a broad group of partners and counterparts, including the U.S. Army Corps of Engineers, Sacramento District, Washoe County's Truckee River Flood Project, Pyramid Lake Paiute Tribe, Nevada Department of Wildlife, U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, U.S. Geological Survey, Truckee Meadows Water Authority, and the Nature Conservancy and its contractors, the U.S. Army Engineer Research and Development Center (ERDC) has developed a benefits scoring mechanism to structure discourse and debate and help build consensus for alternatives selection.	

Provision for passage both up- and downstream are identified and included in the benefits computations.

Sponsor Urban Flood Damage Reduction and Channel Restoration Development and Demonstration Program for Arid and Semi-Arid Regions (UFDP), USACE, Sacramento District.

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Partners USACE, Sacramento District, Washoe County's Truckee River Flood Project, Pyramid Lake Paiute Tribe, Nevada Department of Wildlife, U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, U.S. Geological Survey, Truckee Meadows Water Authority, and the Nature Conservancy.