

Public Comment Period: Juvenile Salmonid Collection System Pilot Project at Shasta Reservoir – McCloud River Arm

The California Department of Water Resources (DWR) is pleased to announce a 30-day public comment period for the Initial Study/Mitigated Negative Declaration for the Juvenile Salmonid Collection System (JSCS) Pilot Project. The proposed project is a 1-2-year pilot study that will evaluate the feasibility and viability of collecting juvenile anadromous salmonids as they emigrate out of historical habitat upstream from Shasta Dam. The most challenging aspect of passing fish around high-head dams is providing efficient collection and downstream passage for juvenile fish migrating out to the ocean. Thus, the success of this project is an integral step in the reintroduction of native anadromous salmonids back into historical spawning and rearing tributaries of the upper Sacramento River system.

The pilot project comes as anadromous salmonids, including winter-run Chinook salmon, are facing challenges that imperil their long-term survival. During their summer spawning season, winter-run Chinook salmon require cold water habitat, but Keswick and Shasta dams prevent many from reaching the high-elevation colder waters of their historical range. As a result, Shasta Dam must be operated to provide cold water releases to sustain good holding and spawning temperatures. Maintaining cold water for releases during warmer months will be challenging under climate change scenarios or prolonged periods of drought, as evident by the egg mortality estimated for winter-run Chinook salmon in the Sacramento River in recent years.

The JSCS pilot project will further state and federal fisheries recovery plans by establishing a foundation for the reintroduction of salmon into the colder waters of the McCloud River above Shasta Reservoir. The JSCS project also contributes to the development of a more resilient and sustainably managed water resources system that can better withstand drought conditions. Given its adaptability, the JSCS may be considered for other reintroduction efforts above high-head dams in California.

The JSCS is an experimental, adaptive, and mobile guidance and capture system designed to collect out-migrating juvenile salmonids at the head of the reservoir, just downstream from where rivers enter reservoirs. The three JSCS components to be tested in the McCloud Arm of Shasta Reservoir this fall are a guidance net, a temperature curtain, and a debris boom. The proposed experimental evaluation approach will determine if the system creates desired conditions to guide fish, control water temperatures, and manage debris. No fish will be used to test the collection efficiency of the system during the initial 1 or 2 years of testing. However, this effort will inform future testing with fish and will also determine key objectives for fish trap design and fabrication. If the initial testing is successful, the fish trap will be fabricated, and fish collection efficiency testing will occur in subsequent years.

The JSCS design and evaluation team is led by DWR in partnership with NOAA Fisheries, the California Department of Fish and Wildlife, the Winnemem Wintu Tribe, and others. The California Department of Fish and Wildlife [awarded DWR \\$1.5 million](#) for the first year of testing for the project.

Where to find the Initial Study/Mitigated Negative Declaration: The draft Initial Study/Mitigated Negative Declaration can be found at [Juvenile Salmonid Collection System Pilot Project \(ca.gov\)](#).

Public Review Period: A 30-day public review period will begin on May 25, 2022. Written comments must be submitted to the DWR no later than 5:00 PM on June 23, 2022.

Contact Information: Written comments on the draft Initial Study/Mitigated Negative Declaration may be addressed to: Randy Beckwith, California Department of Water Resources, Division of Regional Assistance, Riverine Stewardship Program Engineering, 715 P Street, 6-0468, Sacramento, CA 95814 and RSP@water.ca.gov.