

Field Activity Advisory

Trap and Transport of Adult Fall-Run Chinook Salmon

November 1 – December 31, 2016

Reclamation and the California Department of Fish and Wildlife (CDFW), as part of the San Joaquin River Restoration Program (SJRRP), will resume an adult salmon trap and transport study beginning in November to relocate fish that stray into the San Joaquin River (SJR) and its tributaries above the Merced River confluence. The study seeks to capture and relocate adult fall-run Chinook salmon that have bypassed the Hills Ferry Barrier (HFB), a temporary picket-style fish barrier that is operated annually between mid-September to late-December upstream of the Merced River confluence. While the HFB is effective to encourage arriving salmon to continue migration up the Merced River, a portion still get through the structure and are considered “lost” as they travel to San Joaquin River areas not suitable for spawning, such as Mud Slough, Salt Slough, and drainage canals.

Fish collected during this study will be relocated using a fish transport tank to the SJR above Highway 99 to support additional scientific studies aiming to evaluate effects of environmental conditions on salmon spawning, hatching, and rearing/emigration success. Conducted annually since 2012, the SJRRP Adult Trap and Haul Program serves to revise and update protocols and procedures for trap and transport activities to move adult Chinook salmon around existing barriers to suitable holding and spawning habitat. Information collected through this activity is used to help guide reintroduction of Chinook salmon consistent with the SJRRP’s Restoration Goal.



Who: Bureau of Reclamation (Reclamation) and California Department of Fish and Wildlife (CDFW)

What: Reclamation and CDFW staff will install fyke nets (see photo on page 2) at three to four mainstem locations upstream of the HFB, as well as in Mud and Salt Slough and the Eastside Bypass. These nets are designed to capture fish as they swim upstream and are flanked by mesh wing walls held in place with T-posts leading to a cylindrical trap. Signage, lights, flagging and other navigational markers will be installed at and near these structures to inform boaters and the general public. In addition to these efforts, CDFW staff will use dip-netting at the terminal ends of irrigation canals and ditches to capture adult Chinook salmon that bypass these nets.

All trapped salmon will be measured for fork length, sexed, given a condition score (*i.e.*, good, poor, etc.), and tagged with a visible Peterson disk tag. In addition to the disc tags, female salmon will be esophageally implanted with an encapsulated 23mm low frequency half-duplex passive integrated transponder (PIT) tag capable of transmitting a read-only unique signal and identification number. Both external and internal tags will promote post-release monitoring and data collection activities.

Tagged fish will be loaded streamside into a fish transport tank and hauled to a suitable release location in Reach 1A between Friant Dam and the Highway 99 Bridge. Fish transported to Reach 1A will either be released directly to the

river or streamside spawned. Eggs from female fish selected for streamside spawning will be mixed with milt from male fish and placed in streamside incubators positioned at secure locations. After hatching, fry will be held in rearing tanks until they reach a size large enough to be coded wire tagged and released into the river for additional study.

Where: Fish trapping will occur at SJR locations upstream of the HFB, and include the Eastside Bypass, and Mud and Salt Sloughs. Fish that stray into drainage canals upstream of the HFB will be recovered with dip nets. All locations are accessed from the public right-of-way or in areas where landowners have approved access.

When: November 1 – December 31, 2016. Fyke nets will be installed after November 1, 2016, and continue operation if water temperature and flow are considered adequate.

Recreational Fishing: No recreational fishing that uses bait, lures or other means to target salmon in SJR above the Merced River confluence is allowed per state fish and game code. Any inadvertently caught salmon must be immediately returned to the river. To confidentially report poaching, call the CDFW CalTIP line at 888-334-CalTIP (888-344-2258).



Salmon Carcasses: Salmon die after spawning, so the carcasses of these fish will remain in the river. The carcass supports ecosystem function, returning nutrients and other beneficial products back into the river's ecosystem as it biodegrades. Female fish carcasses will have a color coded tag that contains the Program's hotline phone number. River users that find a tagged salmon carcass or tag are asked to call the hotline number and report the tag color and location of the find.

Questions about this activity should be directed to the study's agency points-of-contact provide below.

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Questions about the SJRRP's field activities on public and private land should be directed to the SJRRP Landowner Coordinator using the information provided below.

Craig Moyle, Landowner Coordinator
Office (direct line): 916-418-8248
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Email: craig.moyle@mwhglobal.com

Contact the SJRRP Hotline, 916-978-4398, or email RestorationFlows@restoresjr.net if you see any problems or have any concerns.

**For more information, please visit the SJRRP Web site at www.restoresjr.net.
Field Advisories for activities are available at www.restoresjr.net/activities/field/index.html**