

Field Activity Advisory

Trap and Transport and Streamside Spawning of Adult Fall-run Chinook Salmon

November 1 - December 31, 2015

The San Joaquin River Restoration Program is conducting a trap and transport study of adult Chinook salmon that stray into the San Joaquin River (SJR) and its tributaries above the Merced River confluence. Fish collected during this study will be transported to the SJR above Highway 99 for spawning monitoring studies. Conducted annually since 2012, the effort 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 adaptively manage the future reintroduction of Spring-run Chinook salmon to the SJR, an element of the Program's Restoration Goal.



The study utilizes adult Fall-run Chinook salmon that have bypassed the Hills Ferry Barrier (HFB), a temporary picket-style fish barrier that is operated every year from mid-September to mid-December just upstream of the SJR confluence with the Merced River. While the HFB is effective in keeping some salmon from straying into the SJR main stem, a portion gets through the structure for a number of reasons. These fish often travel to areas not suitable for spawning, such as Mud Slough, Salt Sloughs and drainage canals, and are considered "lost" as they cannot contribute to overall SJR salmonid populations.

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

What: Reclamation and CDFW staff will install cylindrical fyke nets (see photo on Page 2) upstream of the HFB, Mud Slough, Salt Slough, and a location upstream of Salt Slough. These nets are flanked by nylon wing walls held in place with T-posts. Signage and other markers will be installed at and near these structures to inform boaters of its location.

All trapped salmon will be measured for fork length, sexed, given a condition score (i.e. good, poor, etc.), and tagged with a visible external Peterson disk tag and an acoustic transmitter (female fish only). Tagged fish will be loaded streamside into a fish transport tank and hauled to a suitable release location between Friant Dam and the Highway 99 Bridge, also referred to as Reach 1A. Fish are released to the river from tank with dip nets. Fish transported to Reach 1A will either be released directly to the river or streamside spawned. Eggs from fish selected for streamside spawning will be mixed with milt from male fish and placed in streamside incubators positioned at secure locations. Fish from these incubators will be held in holding pens until they reach a size large enough to be tagged and released into the river for additional study.

To track the movement of acoustically-tagged fish, up to 20 single channel receivers capable of identifying coded transmitter tags will be strategically placed throughout Reach 1A. Tagged fish will also be manually tracked using a portable receiver from a boat and from shore to determine the locations between single channel receivers or specific locations within sections of the river. This tracking allows biologist to determine movements, observe behavior and redd (nest) locations, and assess survival.

Where: Fish trapping will occur at SJR locations upstream of the HFB and at 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, 2015. Fyke nets will be installed after November 1, 2015, and continue operation if water temperature and flow are considered adequate.

Salmon Carcasses:

Salmon die after spawning, so the carcasses of these fish will be in the river. The carcass is part of the salmon's lifecycle, 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
Mobile: 916-642-6383
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