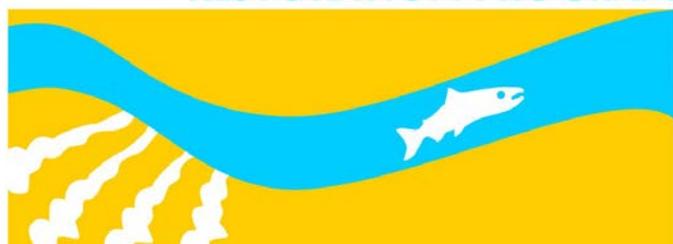


Study 20

Adult Passage

**Public Draft
2013 Monitoring and Analysis Plan**

SAN JOAQUIN RIVER
RESTORATION PROGRAM



San Joaquin River Restoration Program

2013 Monitoring and Analysis Plan

Adult Passage Study

1. Statement of Need: Task 3 of the San Joaquin River Restoration Program (SJRRP) Fish Passage Evaluation Plan is being proposed to complete recommendations that were developed during Task 2 as well as others that have been identified by the Program. The goal is to develop conceptual alternatives to improve conditions on the river to allow for unimpeded fish passage for the entire Restoration area. The objective of Task 3 is to draft recommended fish passage improvements by developing alternative solutions at structures that have been identified as potential fish barriers. This work will be completed during 2013. The focus fish for the evaluation will be adult Chinook salmon but can include other fish species if there is evidence that they will be present at the structure and will need passage.

The work for Task 3 will include structures that were identified in Task 2 that are not part of site-specific projects. Site-specific priority projects are already being studied under the Mendota Pool Bypass and Reach 2B Channel Improvements Project, the Reach 4B, Eastside Bypass, and Mariposa Bypass Channel and Structural Improvements Project, and the Arroyo Canal Fish Screen and Sack Dam Fish Passage Project, or other ongoing projects. Structures identified for alternatives within these projects are already being evaluated for fish passage improvements, so they will not be included in Task 3.

2. Background: Table 1 lists the structures as being a barrier to adult Chinook salmon in Task 2 that were recommended for Task 3.

Table 1. Task 3 Recommended Structures

Structure
Chowchilla Bypass Control Structure
San Joaquin River Control Structure
San Mateo Avenue
Mendota Dam
Sack Dam
San Joaquin River Reach 4B Headgates
Merced Refuge Weir #2
Merced Refuge Weir #1
Dan McNamara Road
Eastside Bypass Control Structure
Mariposa Bypass Control Structure
Mariposa Drop Structure
Eastside Bypass Rock Weir

These included structures that were initially determined to be barriers during Task 1 and those that were studied in detail during Task 2 that were identified for improvement. Structures from Table 1 that will be assessed in Task 3 include the Chowchilla Bypass Control Structure and the Eastside Bypass Rock Weir. Additional structures that were not included in Task 1 or Task 2 but have been identified in the Framework for Implementation Plan for improvements (that are not part of site specific projects) include the Avenues 18-1/2 and 21 Bridges on the Chowchilla Bypass.

3. Methods: The Chowchilla Bypass Control Structure, Avenues 18-1/2 and 21 Bridges were not evaluated in detail during Task 2 so these structures will need to have a preliminary hydraulic assessment completed that would include data collection and modeling similar to what was completed in Task 2. Topographic surveys and hydraulic models will need to be developed to complete Task 3. Alternative designs that will be developed during Task 3 will include a detailed fish passage evaluation that will include hydraulic modeling to evaluate velocity and water depth. The modeling will to ensure that the designs are sufficient for unimpeded fish passage.

5. Schedule: The schedule considers the potential for flows in the early spring for data collection, but it could also hinder topographic surveys if flows exceed what is considered safe for employees to be working in channel, and conflicting work schedules for additional staff. This schedule is conservative due to these assumptions.

Initial Data Collection is scheduled for January – March 2013. Modeling and detailed passage evaluation of structures is scheduled for completion in June 2013. Conceptual alternative designs and cost estimates is scheduled for completion by December 2013.

6. Deliverables: A final report is planned for public release by January 2014 that will include a summary of data collection efforts, hydraulic model results of existing conditions, conceptual alternative designs, and cost estimates.

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