

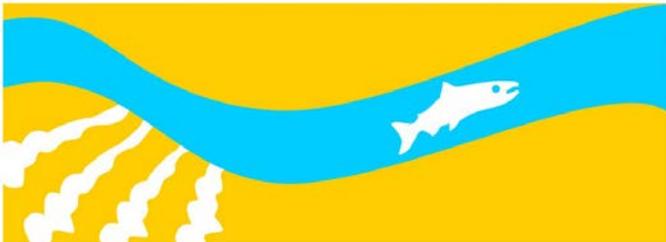
**Study 16**

# **Floodplain Quality**

**Public Draft**

**2013 Monitoring and Analysis Plan**

**SAN JOAQUIN RIVER**  
RESTORATION PROGRAM



**September 2012**



## **San Joaquin River Restoration Program**

### **2013 Monitoring and Analysis Plan**

#### **Floodplain Quality**

##### **1. Statement of Need**

The Restoration Goal of the San Joaquin River Restoration Program includes the return of viable, long-term and sustainable populations of naturally-producing spring and fall-run Chinook salmon. To realize restoration of the Lower San Joaquin River salmon populations, successful completion of the freshwater portion of the lifecycle must occur. Of special importance is the survival and growth of juvenile salmon in floodplain environments. These temporarily inundated environments often provide conditions that lead to increased salmon growth and presumably better survival.

##### **2. Background**

The SJRRP is developing alternatives for levee setbacks in Reach 2B and Reach 4B1 to provide adequate fish habitat. Two important factors to defining acceptable fish habitat are both area available and the quality of that area as determined by cover features such as undercut banks, woody debris, and vegetation. There is currently little understanding of the amount of cover features present along the San Joaquin River and there is some uncertainty regarding the amount of habitat present in the existing river corridors. This study aims to quantify the amount of cover features present in the existing river system, to inform the levee setback alternatives and revegetation designs.

##### **3. Anticipated Outcomes**

Field surveys of the fish habitat availability will increase the confidence in the previous SRH-2D simulations of fish floodplain habitat. The field surveys of the habitat will also provide information for the revegetation and floodplain designs that are ongoing in Reaches 2B and 4B1.

##### **4. Methods**

At selected areas within each reach, we would inventory the cover features present by classifying individual areas according to defined cover categories that were used in the previous Floodplain Habitat Study. Categories would consist of attributes believed to be important to salmon floodplain survival such as woody debris, boulders, and woody vegetation.

There would also be a field study to refine the habitat suitability numbers associated with each cover type by performing a field study on a similar low-land river system in the Central Valley.

## **5. Schedule**

Field work is expected to occur during a three week period in March and April of 2013. Additional time for analysis will occur before and after this period.

## **6. Budget**

Field work labor and travel: 50K (15 days in the field X three people)

## **7. Deliverables**

Draft and Final Reports to the Annual Technical Report

## **8. Point of Contact/Agency and responsibilities**

Blair Greimann, PI, Reclamation

S. Mark Nelson, Co-PI, Reclamation: survey field work