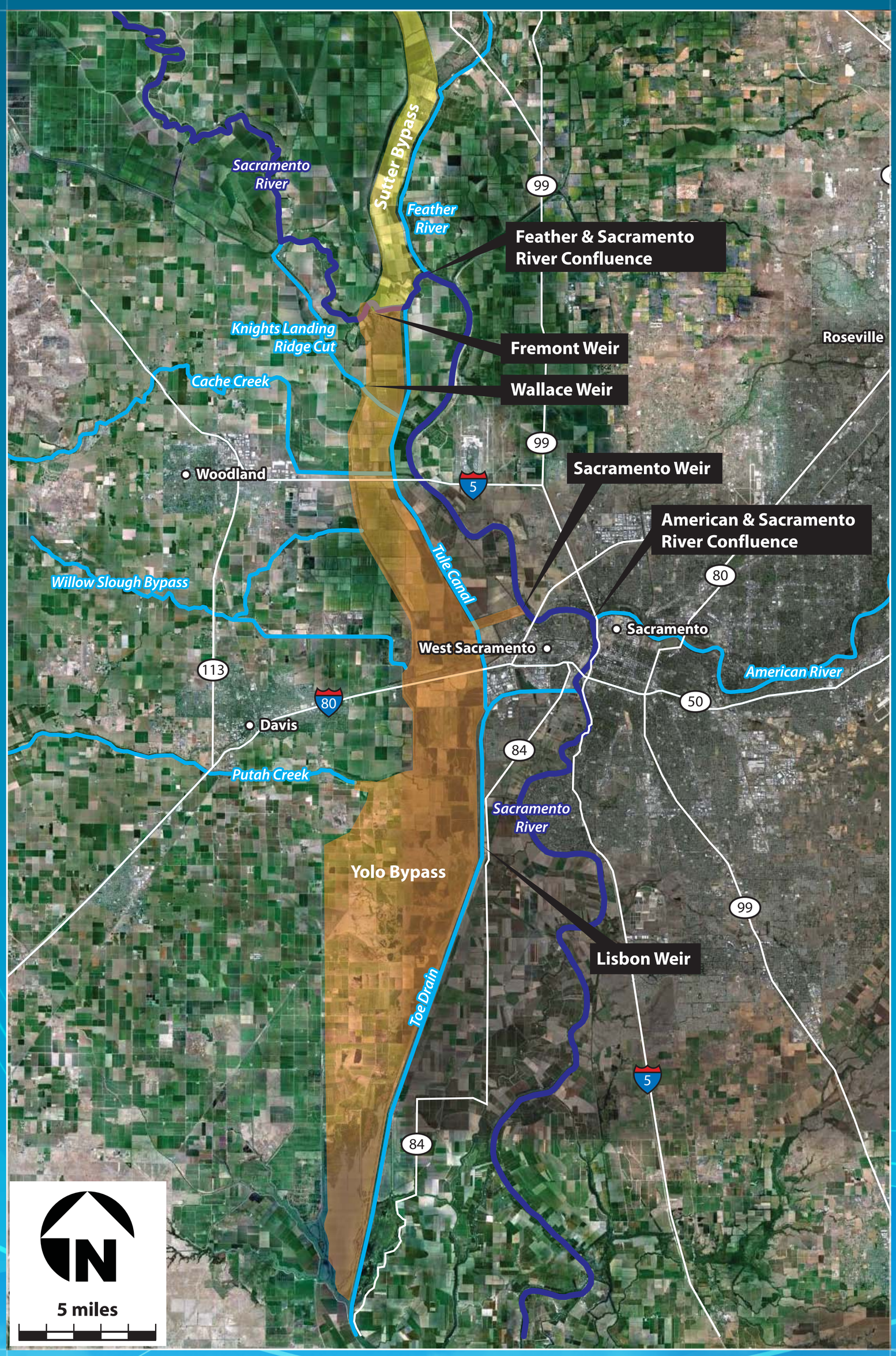
# Yolo Bypass Salmonid Habitat Restoration and Fish Passage Environmental Impact Statement/ Environmental Impact Report




## Project Area

The project area includes the Yolo Bypass and the lower Sacramento River basin.

## Major Water Bodies & Infrastructure Involved

- Sacramento River
- Fremont, Sacramento & Lisbon weirs
- Knights Landing Ridge Cut & Wallace Weir
- Cache & Putah Creeks
- Willow Slough Bypass
- Tule Canal & Toe Drain

## Local Jurisdictions

Sacramento, Solano, Sutter & Yolo counties

## National Marine Fisheries Service Biological Opinion

The National Marine Fisheries Service (NMFS) Biological Opinion (BO) and Conference Opinion on the Long-term Operation of the Central Valley Project (CVP) and State Water Project (SWP) (NMFS BO) was issued on June 4, 2009. The NMFS BO concluded that, as proposed, the CVP and SWP operations were likely to jeopardize the continued existence of four anadromous fish species listed under the Federal Endangered Species Act (ESA): Sacramento River winter-run Chinook Salmon, Central Valley spring-run Chinook Salmon, Central Valley steelhead, and Southern Distinct Population Segment (DPS) North American green sturgeon. The NMFS BO sets forth Reasonable and Prudent Alternative (RPA) actions that would allow continuing CVP and SWP operations to remain in compliance with the ESA.

STATION 1B

# Yolo Bypass Salmonid Habitat Restoration and Fish Passage Environmental Impact Statement/ Environmental Impact Report

## Purpose and Need/Project Objectives

### What is a purpose and need statement?

A purpose and need statement is an explanation of why a project is needed and objectives for addressing the need(s).

### Draft Project Need :

Significant modifications to the historic floodplain of California's Central Valley for water supply and flood damage reduction purposes has resulted in a loss of fisheries rearing habitat, migration corridors, and food web production for fish and have hindered native fish species that rely on floodplain habitat during part or all of their life history. This loss in habitat quality and accessibility has led to a decline in abundance, spatial distribution, and life history diversity associated with native ESA- and California Endangered Species Act (CESA)-listed fish species.

### Draft Project Purpose:

The purpose of the action is to create more suitable conditions for fish in the Yolo Bypass and/or lower Sacramento River basin by implementing RPA actions I.6.1 and I.7, as described in the NMFS BO and the 2012 Yolo Bypass Salmonid Habitat Restoration and Fish Implementation Plan.

Specific biological purposes related to implementing RPA action I.6.1 include increasing access to, and acreage of, seasonal floodplain fisheries rearing habitat; increasing aquatic primary and secondary biotic production to provide food through an ecosystem approach; and providing access to seasonal habitat through volitional entry.

The purpose of RPA action I.7 is to reduce migratory delays and loss of fish at Fremont Weir and other structures in the Yolo Bypass. Specific biological purposes related to RPA action I.7 include improving connectivity within the Yolo Bypass for passage of juvenile salmonids and green sturgeon and improving connectivity between the Sacramento River and the Yolo Bypass to provide passage for adult Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, and Southern DPS of green sturgeon.

## Potential Elements for Alternatives

Both physical and operational modifications will be included in efforts to increase seasonal inundation and improve fish passage in the Yolo Bypass and lower Sacramento River basin.

- Physical and operational modifications at Fremont, Sacramento and Lisbon weirs
- Removal of barriers to fish passage within the Bypass
- Actions to improve connectivity to reduce fish stranding in the Bypass
- Modifications at Knights Landing Ridge Cut and/or Wallace Weir to reduce adult fish straying
- Changes in inundation periods, durations, and acreages in the Bypass
- Other measures suggested through the scoping process

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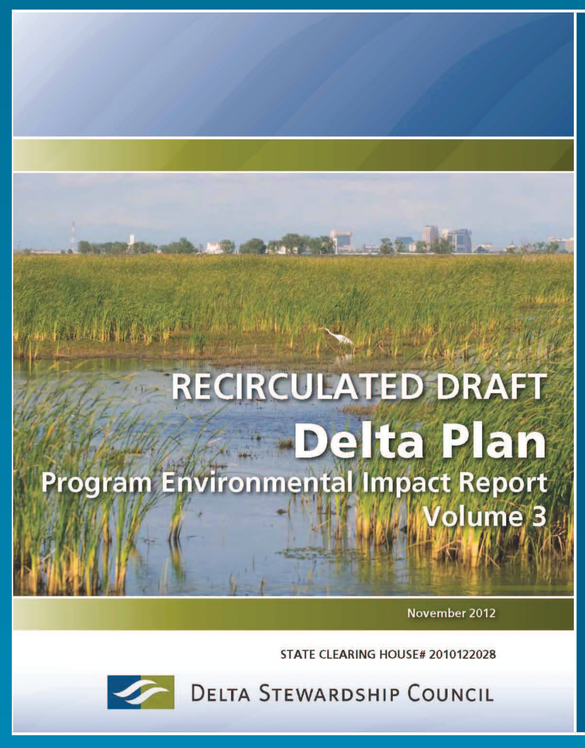
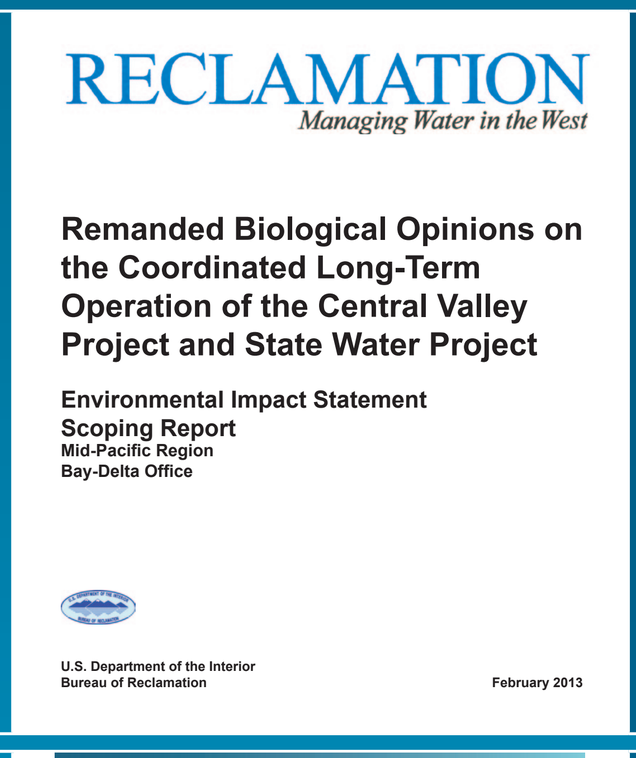
## Relationships to Other Projects and Initiatives

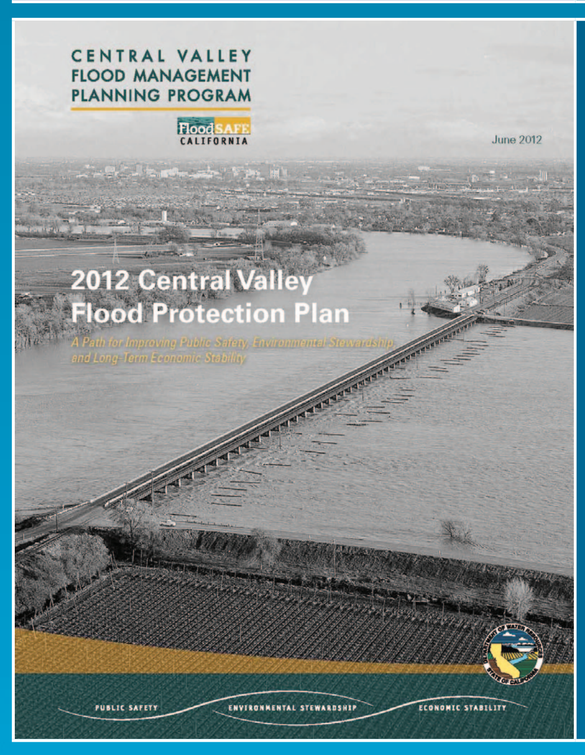
The Project is related to several other restoration and Delta efforts. The agencies will continue to coordinate with these efforts throughout development of this Project.




**Delta Plan**
http://deltacouncil.ca.gov




**Remanded Biological Opinions on the Coordinated Long-Term Operation of the CVP and SWP**
http://www.usbr.gov/mp/BayDeltaOffice/Documents/remand.html




**Central Valley Flood Protection Plan**
http://www.cbfpp.ca.gov/CVFPP

**Bay-Delta Conservation Plan (BDCP)**
http://baydeltaconservationplan.com

## Bay-Delta Conservation Plan Comparison

| | Reasonable & Prudent Actions I.6.1 & I.7 | BDCP Conservation Measure (CM) 2 |
|---|---|---|
| Objective | Avoid jeopardizing Endangered Species Act (ESA) listed species | Conservation and management of BDCP covered species |
| Acreage Target | 17,000-20,000 acres | 7,000-17,000 acres |
| Plan Area | I.6.1 - Lower Sacramento River Basin<br>I.7 – Yolo Bypass | Yolo Bypass |

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## Environmental Review Process & Target Deadlines

Environmental compliance activities associated with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) will:

- Evaluate reasonable alternatives that could reduce or avoid environmental impacts
- Provide information for public review and comment
- Identify significant environmental impacts
- Develop mitigation (ways to reduce or avoid environmental impacts)
- Communicate to decision makers the impacts, mitigation and public comments

| NMFS BO Issued | Public Scoping | Preparation of Draft EIS/EIR | Publication of Draft EIS/EIR | Public Meetings/ Comment Period | Publication of Final EIS/EIR | Final Decision |
|---|---|---|---|---|---|---|
| *June 2009 & Amended in 2011* | *March 2013** | *March 2013 – December 2014* | *December 2014* | *December 2014 - February 2015** | *December 2015* | *January 2016* |

*Note: This timeline provides a tentative project schedule and may change.*

** Denotes opportunities for public comment.*

## Public Scoping Process

***What is Public Scoping?*** Public scoping invites agencies, stakeholders, and the interested public to participate in the environmental review process. The Bureau of Reclamation (NEPA lead agency) and the California Department of Water Resources (DWR) invite agency, stakeholder, and public input on the Draft Environmental Impact Statement/Report (EIS/EIR).

**Scoping helps to identify and refine potential:**

- Options and alternatives
- Environmental impacts
- Mitigation measures

We need the public's help in determining the scope of issues to be addressed in the EIS/EIR. Your input is appreciated and valued. Please provide input on:

- Suggested alternatives to the Project
- Potential significant environmental impacts of the Project
- Local information and geographic-specific knowledge
- Any other issues you'd like to raise about the Project

STATION 3

# Yolo Bypass Salmonid Habitat Restoration and Fish Passage Environmental Impact Statement/ Environmental Impact Report

## Key Resource Areas that have the Potential to be Affected

The Project has the potential to affect the following resources:

- **Water Resources:**
  - ***Water Quality:*** increased area, depth and duration of seasonal floodplain inundation within the Yolo Bypass could affect water quality including dissolved oxygen, pH, nitrogen, pesticides, and methylmercury. Construction activities also have the potential to affect concentration of the constituents.
  - ***Groundwater:*** recharge to the groundwater system may also be increased because of longer periods of inundation.
  - ***Water Supply:*** water changes in inundation in the Yolo Bypass could change flows in the Sacramento River when flows enter the bypass system. The Project could potentially reduce supplies to Sacramento River diverters.
  - ***Flood Control:*** modifications to structures within the Yolo Bypass could affect flow patterns; however, the design would maintain flood control capacity of the bypass system.
- **Land Use, including agriculture:** modified inundation timing could take land out of production, which could affect prime farmlands, Williamson Act lands, and other open space protection
- **Biological Resources, including fish, wildlife, and plant species:** restoration of rearing habitat and improved fish passage would benefit species of juvenile and adult fish. Modifications to flows in the Sacramento River because of increased flows into the Yolo Bypass could affect fish within this stretch of the river. Changes to inundation patterns in the Yolo Bypass could affect existing vegetation and food production for waterfowl.
- **Air Quality:** construction could cause temporary, short-term increases in emissions of criteria pollutants or their precursors.
- **Global Climate Change:** construction could cause temporary, short-term increases in greenhouse gas emissions, including carbon dioxide, methane, and nitrous oxide.
- **Recreation:** inundation changes could affect food supplies for waterfowl, which could result in reduced recreational opportunities, and restrict public access to hunting and fishing. Increased inundation could improve habitat-based recreation such as fishing and wildlife viewing/observation.

The Environmental Impact Statement/Report (EIS/EIR) will evaluate the potential impacts to these resources for each alternative considered and will identify actions to reduce, avoid, or mitigate significant impacts. This list describes potential impacts to key resource areas, but the EIS/EIR will assess impacts to all resources.

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

DEPARTMENT OF WATER RESOURCES
STATE OF CALIFORNIA

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## How to Submit Comments

All comments are due by April 4, 2013

## Tonight:

- Provide oral comments to the court reporter
- Fill out a comment form at this station and return it to the comment box
- You may provide written comments or annotations on the map on the back of the comment card that are geographic - specific (e.g. comments on existing infrastructure).

## By April 4, 2013:

You may either mail the comment card to the address on the back; or mail, email or fax a letter to the contact information below. Please include your name, address and phone number.

## Mail:

Bay-Delta Office
Bureau of Reclamation, Interior
801 I Street, Suite 140
Sacramento, CA 95814-2536
Attention: Traci Michel
Telephone: (916) 414-2420
Fax: (916) 414-2439
Email: tmichel@usbr.gov

For additional information, you can also contact Megan Sheely, DWR, at (916) 651-9623 or megan.sheely@water.ca.gov

Wish to stay up to date on the progress of the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Planning and Environmental Compliance Project? Join Reclamation's mailing list at www.usbr.gov/mp/baydeltaoffice/documents/yolo.html and for additional project information visit DWR's project website at:
http://www.water.ca.gov/environmentalservices/yolo_bypass_salmonid.cfm