

RECLAMATION

Managing Water in the West

Yolo Bypass Salmonid Habitat Restoration and Fish Passage

**Public Scoping Report
Yolo County, California**



**U.S. Department of the Interior
Bureau of Reclamation Bay-Delta Office
Sacramento, California**

**California Department of Water Resources
Sacramento, California**

July 2013

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Yolo Bypass Salmonid Habitat Restoration and Fish Passage

**Public Scoping Report
Yolo County, California**

Prepared by

**United States Department of the Interior
Bureau of Reclamation
Mid Pacific Region, Bay-Delta Office**

**California Department of Water Resources
Sacramento, California**



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Executive Summary

This report documents the environmental scoping meetings held in March 2013 for the Yolo Bypass Salmonid Habitat Restoration and Fish Passage effort. The purpose of scoping is to obtain information on significant issues associated with a project to guide an agency's environmental review. As part of this scoping process, the Bureau of Reclamation and the California Department of Water Resources (DWR) held public meetings to receive comments on the project.

As part of the Yolo Bypass Salmonid Habitat Restoration and Fish Passage effort, Reclamation and DWR are investigating potential actions to improve fish passage in the Yolo Bypass and increase fisheries rearing habitat in the lower Sacramento River basin, including the Yolo Bypass.

Reclamation and DWR have initiated preparation of an Environmental Impact Statement/Environmental Impact Report. This scoping report outlines the project background, scoping process, and comments received. Recurring themes indicate that commenters are interested in the following topics:

- Public involvement and coordination;
- Program-level or project-level analysis;
- Relationship with the Bay Delta Conservation Plan;
- Proposed alternatives;
- Analysis of effects;
- Further modeling needs;
- Cumulative analysis and coordination with other plans and projects;
and
- Required environmental permits.

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Acronyms and Abbreviations

BDCP	Bay-Delta Conservation Plan
BO	Biological Opinion
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CVFPP	Central Valley Flood Protection Plan
CVP	Central Valley Plan
DPS	Distinct Population Segment
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ESA	Endangered Species Act
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NOP	Notice of Preparation
RPA	Reasonable and Prudent Alternative
SCH	State Clearinghouse
SWP	State Water Plan

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Chapter 1

Introduction

This report documents the scoping activities that occurred for the Yolo Bypass Salmonid Habitat Restoration and Fish Passage effort. The U.S. Department of the Interior, Bureau of Reclamation, the National Environmental Policy Act (NEPA) lead agency, and the California Department of Water Resources (DWR), the California Environmental Quality Act (CEQA) lead agency, are planning to prepare an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) to address potential fish passage and restoration actions in the lower Sacramento River basin, including the Yolo Bypass. Accordingly, these agencies conducted public scoping activities to receive input, including public scoping meetings at the following locations:

- West Sacramento, March 14, 2013
- Woodland, March 14, 2013

1.1 Scoping Purpose and Process

Scoping is generally defined as “early public consultation,” and is one of the first steps of the NEPA and CEQA environmental review process. The purpose of scoping is to involve the public, stakeholders, Indian tribes, and other interested agencies early on in the environmental compliance process to help determine the range of alternatives, the environmental effects, and the mitigation measures to be considered in an environmental document. The results of scoping help to guide an agency’s environmental review of a project.

Scoping is not limited to public meetings; however, public meetings allow interested persons, tribes, organizations, and agencies to listen to information about a proposed project or action and express their concerns and viewpoints to the implementing agencies. The agencies can provide information regarding how additional information or status reports on the process can be obtained.

Agencies also establish a scoping comment period to accept scoping comments submitted in writing. Scoping comments are considered by the agencies during the formulation of alternatives and are used to determine the scope of the environmental issues to be addressed in the environmental document.

1.2 Applicable Regulations

1.2.1 National Environmental Policy Act

NEPA regulations (40 Code of Federal Regulations [CFR] 1501.7) require scoping to determine the scope of the issues to be addressed in the environmental review and to identify significant issues. Scoping should occur early on in the environmental review process and should involve the participation of affected parties.

The lead agency of the proposed action is required to:

1. "Invite the participation of affected Federal, State, and local agencies, any affected Indian tribe, the proponent of the action, and other interested persons (including those who might not be in accord with the action on environmental grounds);
2. Determine the scope and the significant issues to be analyzed in depth in the environmental impact statement;
3. Identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review narrowing the discussion of these issues in the statement to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere;
4. Allocate assignments for preparation of the environmental impact statement among the lead and cooperating agencies, with the lead agency retaining responsibility for the statement;
5. Indicate any public environmental assessments and other environmental impact statements which are being or will be prepared that are related to but are not part of the scope of the impact statement under consideration;
6. Identify other environmental review and consultation requirements so the lead and cooperating agencies may prepare other required analyses and studies concurrently with, and integrate with, the environmental impact statement; and
7. Indicate the relationship between the timing of the preparation of environmental analyses and the agency's tentative planning and decision making schedule" (40 CFR 1501.7).

Public involvement activities are required by the Council on Environmental Quality (CEQ) regulations (40 CFR 1506.6(a)), which state: "Agencies shall: Make diligent efforts to involve the public in preparing and implementing their NEPA procedures." Public scoping meetings help to satisfy this requirement.

CEQ regulations (40 CFR 1508.22, 516 DM 2.3D) require the implementing agency to notify the public that it is preparing an EIS for a project under consideration. Reclamation issued a Notice of Intent (NOI) in the Federal Register on March 4, 2013. Appendix A of this Public Scoping Report includes a copy of the NOI.

1.2.2 California Environmental Quality Act

Although the CEQA does not require public meetings, it encourages early consultation (or scoping) with affected parties. This early consultation often solves potential problems before they turn into more serious problems further on in the process. CEQA describes two other benefits for early consultation:

- a) "Scoping has been helpful to agencies in identifying the range of actions, alternatives, mitigation measures, and significant impacts to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important.
- b) Scoping has been found to be an effective way to bring together and resolve the concerns of affected federal, state, and local agencies, the proponent of the action, and other interested persons including those who might not be in accord with the action on environmental grounds " (CEQA Section 15083).

Parallel to the process of the NOI for NEPA, CEQA requires public notification of the initiation of an EIR through a Notice of Preparation (NOP) (CEQA 15082). DWR will be the Lead Agency under CEQA. The NOP was filed with the State Clearinghouse (SCH) (SCH# 2013032004) on March 4, 2013. A copy of the NOP can be found in Appendix A of this Public Scoping Report.

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Chapter 2 Background

Significant modifications have been made to the historic floodplain of California's Central Valley for water supply and flood damage reduction purposes. The resulting losses of fisheries rearing habitat, migration corridors, and food web production for fish have hindered native fish species that rely on floodplain habitat during part or all of their life cycle.

The National Marine Fisheries Service's 2009 *Biological Opinion and Conference Opinion on Long-term Operation of the Central Valley Project and State Water Project* (NMFS BO) concluded that, as proposed, the Central Valley Project (CVP) and the State Water Project (SWP) operations were likely to jeopardize four anadromous species listed under the federal Endangered Species Act (ESA): Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*), Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*), California Central Valley Steelhead (*Oncorhynchus mykiss*), and the Southern Distinct Population Segment (DPS) of North American green sturgeon (*Acipenser medirostris*). The NMFS BO identifies actions within the Reasonable and Prudent Alternative (RPA) that would allow continuing CVP and SWP operations to avoid jeopardizing these species.

RPA actions I.6.1 and I.7 address salmonid habitat restoration actions in the lower Sacramento River basin and fish passage actions in the Yolo Bypass, respectively. The Yolo Bypass, which currently experiences at least some flooding in approximately 80 percent of years, still retains many characteristics of the historic floodplain habitat that are favorable to various fish species. The primary purpose of the Yolo Bypass is flood damage reduction, but other functions include agriculture and wildlife habitat. Major California restoration planning efforts over several decades (e.g., CALFED, the Bay Delta Conservation Plan [BDCP]) have focused on the Yolo Bypass as a prime area of the lower Sacramento River basin for enhancement of seasonal floodplain habitat.

The two RPA actions being addressed in this EIS/EIR include:

- RPA action I.6.1: Restoration of floodplain rearing habitat, through the increase of seasonal inundation within the lower Sacramento River basin; and,
- RPA action I.7: Reduce migratory delays and loss of salmon, steelhead, and sturgeon, through the modification of Fremont Weir and other structures of the Bypass.

The need for the project is to comply with RPA actions I.6.1 and I.7, as described in the NMFS BO in order to remain in compliance with the ESA. The project objectives are 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 Passage Implementation Plan. The objective of RPA action I.6.1 is to restore floodplain fisheries rearing habitat for juvenile Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead. This action can also improve conditions for special status species, including Sacramento splittail (*Pogonichthys macrolepidotus*) and Central Valley fall-run Chinook salmon (*Oncorhynchus tshawytscha*). Specific biological objectives include:

- Increase access to, and acreage of, seasonal floodplain fisheries rearing habitat;
- Reduce straying, stranding, and presence of migration barriers;
- Increase aquatic primary and secondary biotic production to provide food through an ecosystem approach; and,
- Provide access to seasonal habitat through volitional movement.

The objective 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 objectives include:

- Improve connectivity within the Yolo Bypass for passage of juvenile salmonids and green sturgeon; and,
- Improve 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 North American green sturgeon.

Chapter 3

Scoping Meetings

Reclamation and DWR held two public scoping meetings for the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Draft EIS/EIR on Thursday March 14, 2013 in the cities of West Sacramento and Woodland, California.

Attendance at the two meetings, as indicated by the voluntary sign in sheets presented in Appendix B, included about 35 people at the meeting in West Sacramento, and 19 people at the meeting in Woodland. Attendees included members of the public and representatives from public agencies. Given the voluntary nature of the meeting sign in sheets, these numbers may not capture all of the meeting attendees.

In addition to these scoping meetings, Reclamation and DWR presented information to and received feedback from members of the Yolo Bypass Fisheries Enhancement Planning Team (a working group for the BDCP planning process). This team has been working on habitat restoration within the Yolo Bypass and provided feedback that is included in this Scoping Report.

3.1 Publicity

Multiple meeting notifications were used to announce the intent to start the EIS/EIR process and the public scoping meetings. Appendix A contains copies of the NOI and NOP, and Appendix C contains the newspaper display ads, a press release and web postings utilized to advertise the public scoping meetings.

3.1.1 Notice of Intent/Notice of Preparation

Reclamation published the NOI in the Federal Register and DWR issued the NOP (SCH# 2013032004) on March 4, 2013. Each of these notices announced the project purpose, the agency lead on the project, and contact information. The NOI and NOP listed the meeting dates and times for both scoping meetings.

Based on comments received at the scoping meetings, Reclamation filed a notice to reopen the public comment period for the scoping process with the Federal Register on March 29, 2013 (posted April 23, 2013). The comment period was originally announced to end on April 4, 2013, but was extended through May 6, 2013. Reclamation and DWR also circulated an additional press release notifying stakeholders of the extension. See Appendix A for a copy of the extension notice and press release.

3.1.2 Newspaper Advertisement and Public Mailers

Display advertisements were run in the Sacramento Bee, The Daily Democrat, and The West Sacramento Press (see Appendix C). Reclamation sent a news release via email to approximately 437 stakeholders, agencies and individuals that were on the Reclamation and DWR mailing lists (also included in Appendix C). Reclamation and DWR also posted the meeting dates, times and locations on their project websites at:

<http://www.usbr.gov/mp/BayDeltaOffice/Documents/yolo.html> and
http://www.water.ca.gov/environmentalservices/yolo_bypass_salmonid.cfm

On April 11, 2013, postcard notifications were mailed to landowners within the Yolo Bypass, a focal area of the lower Sacramento River. Approximately 150 landowners were sent postcards. See Appendix C for an example postcard.

3.2 Lead Agency Representative

Table 1 provides a list of agency representatives in attendance during the public scoping meetings.

Table 1. Lead Agency Representatives in Attendance

Representative	Agency
Manny Bahia	DWR
Carrie Buckman	CDM Smith (Consultant)
Brian Crook	CDM Smith (Consultant)
Betty Dehoney	HDR Inc. (Consultant)
Selena Evans	CDM Smith (Consultant)
Patti Idolf	Reclamation
Joshua Israel	Reclamation
Marianne Kirkland	DWR
Traci Michel	Reclamation
Louis Moore	Reclamation
James Newcomb	DWR
Fernando Ponce	Reclamation
Heidi Rooks	DWR
Megan Sheely	DWR
Becky Victorine	Reclamation

Key:

DWR = Department of Water Resources

Reclamation = Bureau of Reclamation

3.3 Meeting Agenda and Content

Both public meetings were held in an open house forum. Attendees were asked to sign in and all contact information provided was entered into a database for the purpose of keeping participants up-to-date on future activities, meetings, and

project information. A short background presentation was provided and all attendees had an opportunity to review various meeting materials and talk directly with project staff (see Appendix D). Meeting materials included project vicinity map handouts, information displays, and comment cards. A court reporter was available for any attendees who wished to submit verbal comments.

3.3.1 Information Displays

Six information displays at four stations were set up to walk the public through known potential issues, impacts, agency roles, and opportunities for public involvement. Agency staff were assigned to each display to answer questions and document issues identified by attendees on a flipchart that accompanied each display. Appendix D contains a copy of the displays and handouts provided to all meeting participants and Appendix E contains summarized flipchart notes recorded at each station. The displays included the following information:

Station 1A – Project Area included a map of the project study area, a list of the local jurisdictions, major water bodies, infrastructure involved, and a description of the NMFS BO.

Station 1B – Purpose and Need/Project Objectives and Potential Elements for Alternatives provided an overview of the project's purpose and need/project objectives, including a description of the NMFS BO RPA actions I.6.1 and I.7, and a list of potential elements for consideration during alternative development.

Station 2A – Relationships to Other Projects and Initiatives provided a list of other regional planning efforts related to the project and a comparison table highlighting the similarities and differences between the project and the BDCP Conservation Measure 2.

Station 2B – Environmental Review Process included an overview of the environmental review process, a summary of the public scoping process, and a tentative project timeline.

Station 3 – Key Resource Areas that have the Potential to be Affected summarized the potential environmental resources that could be affected by the proposed project.

Station 4 – Public Participation provided information on how to submit public comments, the project website, and contact information. A court reporter was also available at the station to transcribe verbal comments. Appendix E contains copies of the court reporter's notes from both meetings.

3.3.2 Handouts

Two handouts were distributed to attendees at each meeting:

- Project vicinity map
- Scoping comment card

The Project vicinity map included a map of the proposed project study area, including the lower Sacramento River basin, the Yolo Bypass, and related infrastructure.

The scoping comment card allowed participants an opportunity to leave written comments at the meeting, or complete at a later date and return the card by mail.

Chapter 4 Scoping Comments

Verbal and written comments were received by Reclamation and DWR during both scoping meetings. Additionally, the agencies accepted written comments through mail, e-mail, and fax during the scoping period of March 4, 2013 through May 6, 2013. A hard copy of all scoping comments, including meeting transcripts and all written comments received at the scoping meetings and throughout the comment period, can be found in Appendix E. Table 2 provides a list of all comments received including available author, affiliation and submission date information.

Table 2. Comments Received

Comment Author	Affiliation	Submittal Date
Brown, David	Sacramento - Yolo Mosquito & Vector Control District	04/22/2013
Cleak, Trevor	Central Valley Regional Water Quality Control Board	03/22/2013
Daly, Barbara		05/06/2013
Daly, Barbara	North Delta CARES	06/28/2013
Damion, Barbara		05/06/2013
Des Jardin, Deirdre	California Water Research	05/06/2013
Katz, David	Knaggs Ranch, LLC & Cal Marsh & Farm Vineyards	04/08/2013
Kulakow, Robin	Yolo Basin Foundation	05/06/2013
Machado, Michael	Delta Protection Commission	04/03/2013
Meserve, Osha	(on behalf of) Local Agencies of the North Delta	05/06/2013
Messer, Cindy	Delta Stewardship Council	05/06/2013
Oggins, Cy	California State Lands Commission	04/04/2013
Orloff, Leah	Contra Costa Water District	05/06/2013
Pogledich, Phillip	Yolo County	05/06/2013
Pollock, Herbert & Lynnel	Pollock Farms	05/06/2013
Pruner, Mark		05/06/2013
Pruner, Mark	Clarksburg Fire Protection District	05/06/2013
Pruner, Mark	Clarksburg Fire Protection District	05/06/2013
Punia, Jay	Central Valley Flood Protection Board	05/06/2013
Ross Merz, Lucas	Sacramento River Preservation Trust	04/03/2013
Skophammer, Stephanie	U.S. Environmental Protection Agency, Region IX	05/01/2013
Stone, Peter		04/29/2013
Suard, Nicole	Snug Harbor Resorts, LLC	03/31/2013
Terry, Melinda	North Delta Water Agency	05/06/2013
Wallace, Jim	Colusa Drain Mutual Water Company	05/19/2013
Wilson, Mark	Wilson Farms & Vineyards	04/29/2013
Wilson, Mark	Wilson Farms & Vineyards	05/09/2013

4.1 Comment Summary

During each of the scoping meetings, the public was encouraged to submit questions or comments, and a court reporter documented verbal comments. Members of the public also submitted comments in writing during and after the public scoping meetings. Appendix E includes copies of both the verbal and written comments submitted. This section presents a summary of the key comments received from the scoping comments.

Reclamation and DWR received feedback from members of the Yolo Bypass Fisheries Enhancement Planning Team that their past meetings included feedback that should be part of the scoping process. Appendix E contains copies of the past meeting notes, and these comments are integrated into the comment summary below.

4.1.1 Coordination and Involvement Process

Commenters questioned the status of the proposed project and future plans for public involvement. Several commenters requested additional stakeholder and public coordination. Others requested close coordination on behalf of the lead agencies with appropriate State, regional and local agencies and to consider all potentially affected parties, plans, and programs.

4.1.2 Program v. Project-Level Analysis

Several commenters voiced concerns regarding the development of a program-level EIS/EIR and would prefer a project-level analysis including immediate, short-term actions to improve fish access and passage on the Yolo Bypass.

4.1.3 Relationship with the BDCP

Multiple comments were received requesting clarification on the relationship between RPA actions I.6.1 and I.7 and the BDCP. Commenters seemed confused on the differences and connections between the RPA actions and the BDCP and their different implementation schedules. Many commenters also requested that the proposed actions within the BDCP be incorporated as project alternatives.

4.1.4 Proposed Alternatives

Commenters provided proposed alternative measures, including both operational and physical modifications. Overall, commenters support an EIS/EIR with a reasonable range of alternatives to increase seasonal inundation and improvements to fish passage, which should avoid significant environmental impacts. Commenters again requested that all BDCP proposed actions related to RPA actions I.6.1 and I.7 be incorporated as project alternatives.

Operational Modifications

Commenters think that the project should integrate management of flood control, the food web in the Bypass, vector control, wetlands, and

methymercury. Commenters suggested analyzing alternatives that include smaller inundation areas, including scenarios that constrain flooding to 2,500 and 4,000 acres or less on the east side of the Yolo Bypass. Assuming an operable gate would be developed at Fremont Weir, commenters suggested analyzing inundation scenarios including February 15, March 1, and March 15 end dates. Other commenters proposed that inundation only be extended in years when natural overtopping of the Fremont Weir occurs. Commenters suggested that managing releases from upstream reservoirs could manage pulses to move fish.

Physical Modifications

Commenters suggested physical modifications be made to improve fish passage within the Yolo Bypass, including the replacement of earthen road crossings over the Toe Drain, improvements to the existing fish ladder at Fremont Weir, the development of an operable gate at Fremont Weir, expansion of the Tule Canal, expansion of wetland restoration south of Lisbon Weir, and the replacement of the existing Lisbon Weir. Commenters also suggested analyzing the “Westside Option” in the EIS/EIR, which includes water entering the Bypass through Knights Landing Ridge Cut.

4.1.5 Analysis of Effects

Flood Control

Commenters expressed concerns that increased inundation for fish habitat in the Yolo Bypass could reduce the Bypass' flood capacity. They are concerned because DWR and the Central Valley Flood Protection Plan (CVFPP) have identified portions of the Bypass levees to be of "high concern." Commenters indicated that the proposed project must be flood neutral, and that any potential impacts should be fully mitigated. The flood analysis must consider how increased inundation from Fremont Weir would interact with inflow from the westside tributaries.

Commenters also requested that the project's flood control analysis evaluate the projected annual frequency of flooding and the expected mean floodplain depth of the Yolo Bypass. Other commenters suggested analyzing the project's potential flood effects on a month-by-month basis to better understand the various proposed inundation scenarios.

Fish

Commenters asked for Reclamation and DWR to establish a target of how many additional fish to include in the Bypass, and then analyze how well each alternative meets that target. Commenters also indicated that the analysis should estimate fish passage and how efficiently juveniles are moved. They requested that the first winter flow pulse should pass through a notch in Fremont Weir because 70-80 percent of winter-run are in first pulse.

Water Quality

Temperature: Commenters expressed concern regarding increased inundation periods and how shallow water habitats could expose fish to warm weather conditions during the months of January to May, creating a potentially uninhabitable environment. Commenters also discussed the potential effects of increased temperatures downstream in the Delta.

Salinity: Commenters requested that the EIS/EIR fully analyze the project alternatives for their influence on salt water intrusion in the statutory Delta.

Methylmercury: Several comments discussed the potential for the project to increase methylmercury production within the Yolo Bypass. Commenters think that proposed increases in depth and duration of Bypass inundation could affect the production of methylmercury. They requested that the EIS/EIR thoroughly examine the potential for resuspension of mercury or methylmercury from in-water work, in terms of both overall water quality and the region's compliance with total maximum daily loads.

Agricultural Drainage: Commenters asked whether the project could increase regulation on agricultural drainage into the Bypass.

Waterfowl

Commenters indicated that the project should avoid a net loss in habitat for migratory birds. Waterfowl need water of a specific depth for foraging, and changing the inundation pattern of the Bypass could reduce habitat.

Water Rights and Supply

Commenters questioned the source and ownership of the water being diverted from the Sacramento River to increase inundation of the Yolo Bypass. Commenters requested clarification on how the Sacramento River and its tributaries flows would be affected if the river was the sole source for increased inundation. They indicated that the EIS/EIR should analyze potential changes to supplies of downstream users, including agricultural users and Delta diverters.

Groundwater

Commenters expressed concerns regarding whether increased inundation would contribute to an increase in current groundwater levels and seepage conditions throughout the project area. Also, they questioned whether decreased flows into the Sacramento River and the Delta could reduce groundwater percolation in those areas.

Agriculture

Several commenters requested that the seasonal timing of inundation of the Yolo Bypass be evaluated to determine the potential effects on continued cultivation of crops, particularly rice. They were concerned that increased inundation could have adverse economic effects to both the landowners and the local economy. Commenters indicated that the analysis should consider

potential impacts on a scale to understand impacts to individual landowners, and asked that the analysis consider drainage from each parcel.

Endangered and Special Status Species

Commenters requested that the EIS/EIR survey the occurrence of and fully analyze potential impacts to all endangered and special status species and their habitats within the project area, not only salmonids. Many commenters questioned why only certain fish species were included in the RPA actions, and not others. Some commenters also suggested that potential fish stranding and passage alternatives be analyzed and implemented on a trial/pilot project basis, prior to full implementation in order to ensure fish benefits.

Nonnative Species

Commenters requested that the EIS/EIR assess the project's potential to encourage the establishment or proliferation of aquatic invasive species in the Bypass and the Delta.

Mosquito Vector Control

Several commenters submitted their concerns regarding the potential for unintended and secondary effects from late spring flooding that could result in increased mosquito populations.

Recreation

Commenters requested that any identified project impacts to recreation be avoided, and if feasible the project should increase recreation opportunities, such as bank fishing, hunting, levee-top trails, and environmental education.

Climate Change

Commenters requested that the EIS/EIR conform to the California Global Warming Solutions Act (Assembly Bill 32) and CEQA Guidelines to incorporate a climate change analysis. Commenters also indicated that the climate change analysis should include potential effects to species, habitat, and cultural resources, as well as a calculation of the direct, indirect, and cumulative effects of greenhouse gas project emissions.

Transportation and Existing Infrastructure

Commenters requested that the EIS/EIR evaluate the potential effects from transportation routes, including emergency service routes. Specific comments were submitted requesting that transportation to and from Ryer Island, in Solano County, not be hindered during periods of inundation.

4.1.6 Further Modeling Needs

Commenters identified further modeling needs for the following resource areas:

- Flood risk potential
- Agricultural impacts (economics)
- Waterfowl impacts analysis

- Hydrodynamics
- Water supply and water rights accounting
- Water quality (temperature, salinity, mercury)
- Groundwater levels/availability

4.1.7 Cumulative Analysis and Compliance with Other Plans and Projects

Commenters identified the following plans and projects that the EIS/EIR should comply with or consider in the cumulative analysis:

- BDCP
- Delta Plan and Delta Reform Act
- State Plan of Flood Control
- CVFPP
- Civil work and regulatory projects from the U.S. Army Corps of Engineers
- 2006 Water Quality Control Plan (update in progress)
- Conservation Strategy for the Sacramento-San Joaquin Delta Ecological Management Zone and the Sacramento and San Joaquin Valley Region
- Sacramento River Bank Protection Project
- Delta Subventions Program
- Land Use and Resource Management Plan for the Primary Zone of the Delta (Management Plan)
- A Framework for the Future: Yolo Bypass Management Strategy
- Central Valley Joint Venture Implementation, Preservation and Restoration Plan
- North Delta Water Agency/DWR 1981 Contract Criteria
- Suisun Marsh Habitat Management Plan
- Yolo Bypass (Vic Fazio) Wildlife Area Management Plan
- Stone Lakes Management Plan
- Sacramento-Yolo Mosquito & Vector Control's Mosquito Reducing Best Management Practices

4.1.8 Required Environmental Permits

Commenters identified the following potential required environmental permits:

- Construction and Industrial Storm Water General Permits
- Phase I and II Municipal Separate Storm Sewer Systems Permit
- Clean Water Act Section 401 and 404 Permits

- Waste Discharge Requirement Permit
- Water Diversion Permit
- California State Lands Commission lease or permit

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